

CC APPLICATION NUMBER: 07/728,198
 CC APPLICATION NUMBER: 9-JULY-1991
 CC PRIORITY APPLICATION DATA:
 CC PRIORITY APPLICATION NUMBER: 07/705,702
 CC PRIORITY APPLICATION DATE: 12-DECEMBER-1991
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Hanson, No. 561221man D.
 CC REGISTRATION NUMBER: 30,945
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (212) 688-9200
 CC FAX: (212) 838-3884
 CC INVENTOR: 100072
 CC SEQUENCE CHARACTERISTICS: 8
 CC LENGTH: 5674 base pairs
 CC TYPE: nucleic acid
 CC TOPOLOGY: linear
 CC MOLECULE TYPE: genomic DNA
 CC NAME/KEY: MAGE-1 gene
 CC REFERENCE/DB: 1644 C; 1569 G; 1185 T; 0 other:
 CC Sequence 5674 BP: 1276 A; 1644 C; 1569 G; 1185 T; 0 other:
 CC Query Match 100.0%; DB 7; Length 5674;
 CC Best Local Similarity 100.0%; Pred. No. 9,266-108;
 CC Matches 163; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 CC Db 57 ACCCATCCAAACATCTTCAGCTCCACCCAGCCAGCCAGAGATCCGGTTCACC 116
 CC Qy 57 ACCCATCCAAACATCTTCAGCTCCACCCAGCCAGCCAGAGATCCGGTTCACC 116
 CC Db 117 CTGCTCTCAACCCAGGAGCCAGGTCGCCAGATGAGCCACTTGAGCATTA 176
 CC Qy 117 CTGCTCTCAACCCAGGAGCCAGGTCGCCAGATGAGCCACTTGAGCATTA 176
 CC Db 177 GTGGTTAGAGAGACGAGGTTTCGGTCTGAGGGCGCGCTTG 219
 CC Qy 177 GTGGTTAGAGAGACGAGGTTTCGGTCTGAGGGCGCGCTTG 219
 CC
 CC RESULT 2
 CC ID US-08-190-411A-1 STANDARD; DNA; UNC: 5674 BP.
 CC DE Sequence 1. Application US/08190411A.
 CC DE Sequence 1. Application US/08190411A
 CC GENERAL INFORMATION:
 CC APPLICANT: Chen, Yach-Tsung; Stockert, Elisabeth;
 CC APPLICANT: Chen, Yach-Tsung; Stockert, Elisabeth;
 CC APPLICANT: Old, Lloyd J.
 CC APPLICANT: Old, Lloyd J.
 CC TITLE OF INVENTION: MONOCLONAL ANTIBODIES WHICH BIND TO
 CC TITLE OF INVENTION: TUMOR REJECTION ANTIGEN PRECURSOR MAGE-1, RECOMBINANT MAGE-1 DERIVED IMMUNOGENIC PEPTIDES
 CC NUMBER OF SEQUENCES: 4
 CC CORRESPONDENCE ADDRESS:
 CC STREET: 805 Third Avenue
 CC CITY: New York City
 CC STATE: New York
 CC ZIP: 10022
 CC COMPUTER READABLE FORM:
 CC MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
 CC OPERATING SYSTEM: PC-DOS
 CC SOFTWARE: Wordperfect
 CC CURRENT APPLICATION DATA:
 CC FILING DATE: 01-FEBRUARY-1994
 CC CLASSIFICATION: 436
 CC PRIOR APPLICATION DATA:

CC APPLICATION NUMBER: 037,230
 CC FILING DATE: 26-MARCH-1993
 CC PRIORITY APPLICATION DATA:
 CC PRIORITY APPLICATION NUMBER: EC/70592/04354
 CC PRIORITY APPLICATION DATE: 12-DECEMBER-1991
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Hanson, No. 561221man D.
 CC REGISTRATION NUMBER: 30,945
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (212) 688-9200
 CC FAX: (212) 838-3884
 CC INVENTOR: 100072
 CC SEQUENCE CHARACTERISTICS: 8
 CC LENGTH: 5674 base pairs
 CC TYPE: nucleic acid
 CC TOPOLOGY: linear
 CC MOLECULE TYPE: genomic DNA
 CC NAME/KEY: MAGE-1 gene
 CC REFERENCE/DB: 1644 C; 1569 G; 1185 T; 0 other:
 CC Sequence 5674 BP: 1276 A; 1644 C; 1569 G; 1185 T; 0 other:
 CC Query Match 100.0%; DB 6; Length 5674;
 CC Best Local Similarity 100.0%; Pred. No. 9,266-108;
 CC Matches 163; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC Db 57 ACCCATCCAAACATCTTCAGCTCCACCCAGCCAGCCAGAGATCCGGTTCACC 116
 CC Qy 57 ACCCATCCAAACATCTTCAGCTCCACCCAGCCAGCCAGAGATCCGGTTCACC 116
 CC Db 117 CTGCTCTCAACCCAGGAGCCAGGTCGCCAGATGAGCCACTTGAGCATTA 176
 CC Qy 117 CTGCTCTCAACCCAGGAGCCAGGTCGCCAGATGAGCCACTTGAGCATTA 176
 CC Db 177 GTGGTTAGAGAGACGAGGTTTCGGTCTGAGGGCGCGCTTG 219
 CC Qy 177 GTGGTTAGAGAGACGAGGTTTCGGTCTGAGGGCGCGCTTG 219
 CC
 CC RESULT 3
 CC ID US-08-190-411A-1 STANDARD; DNA; UNC: 5674 BP.
 CC DE Sequence 1. Application US/08190411A.
 CC DE Sequence 1. Application US/08190411A
 CC GENERAL INFORMATION:
 CC APPLICANT: Bonin, Thierry;
 CC APPLICANT: Bonin, Thierry;
 CC APPLICANT: Bonin, Thierry;
 CC TITLE OF INVENTION: REJECTION ANTIGENS AND USES THEREOF
 CC NUMBER OF SEQUENCES: 16
 CC CORRESPONDENCE ADDRESS:
 CC STREET: 805 Third Avenue
 CC CITY: New York City
 CC STATE: New York
 CC ZIP: 10022
 CC COMPUTER READABLE FORM:
 CC MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
 CC OPERATING SYSTEM: IBM
 CC SOFTWARE: Wordperfect
 CC CURRENT APPLICATION DATA:
 CC FILING DATE: 01-FEBRUARY-1994
 CC CLASSIFICATION: 436
 CC PRIOR APPLICATION DATA:


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CC SOFTWARE: Wordperfect
CC CURRENTHOLDING: D. C. L.
CC ADDRESS: 805 Third Avenue
CC CITY: New York City
CC STATE: NY 10022
CC ZIP: 10022
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
CC APPLICATION NUMBER: US/08/299,849B
CC FILING DATE: 1-SEPTEMBER-1994
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: 08/037,230
CC FILING DATE: 26-MARCH-1993
CC PRIOR APPLICATION DATA: PCT/US92/04354
CC APPLICATION NUMBER: 07/607,043
CC FILING DATE: 12-DECEMBER-1991
CC PRIOR APPLICATION DATA: 07/764,364
CC APPLICATION NUMBER: 07/728,838
CC FILING DATE: 9-JULY-1991
CC PRIOR APPLICATION DATA: 07/705,702
CC APPLICATION NUMBER: 07/705,702
CC FILING DATE: 23-MAY-1991
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Hanson, NO 361201man D.
CC REGISTRATION NUMBER: LUD 5355
CC REFERENCE/DOCKET NUMBER: LUD 5355
CC TELEPHONE: (212) 688-9200
CC TELEFAX: (212) 838-3884
CC INFORMATION FOR SEQ ID NO: 9:
CC DEFINITION: Nucleic acid
CC LENGTH: 4137 base pairs
CC TYPE: nucleic acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: genomic DNA
CC FEATURE:
CC FEATURE KEY: WAGE-3 gene
CC SEQUENCE 4157 BP: 953 A; 1134 C; 1185 G; 885 T; 0 other:
CC Query Match Similarity 43.6%; Score 71; DB 7; Length 4157;
CC Mismatches 108; Conservative 0; Mismatches 31; Indels 1; Gaps 1;
CC Db 3 CATCCAGATCCCATCCGCGAGATCCGTTCCCTCTCCCTGACACCCAGGAGATC 62
CC QY 80 CACCCACGACGACGACGACGACGATCCGTTCCACCTCTCTCACCAGGAGAC 139
CC Db 63 AGCG -GCCGCGATGTCGCGATCTCTTCACATCGAGGCGTGGAGACGACATC 121
CC QY 140 CAGTGCCGACGATGTGACCCCATGCTTGCATCTAGTCATGTGTTAGACGACGAGTTT 199
CC Db 122 TCCGCGATGACGACGCGCTG 141
CC QY 200 TCGGTCGTGAGGCGCGCTGT 219
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CC RESULT
CC ID US-08-299-849B-10 STANDARD; DNA; UNC: 662 BP.
CC AC xxxxx
CC DE Sequence 10, Application US/08299849B
CC DE Sequence 10, Application US/08299849B
CC GENE:
CC PATENT NO. 5612201
CC APPLICANT: Dr. Plan, Etienne; Boon-Tallier, Thierry;
CC APPLICANT: Leth, Bernard; Sakora, Jean-Pierre; De Smet, Charles;
CC APPLICANT: Chemes, Patrick
CC TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precursor
CC NUMBER OF SEQUENCES: 48

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CC CORRESPONDENCE ADDRESS:
CC ADDRESS: 805 Third Avenue
CC CITY: New York City
CC STATE: NY 10022
CC ZIP: 10022
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
CC APPLICATION NUMBER: US/08/299,849B
CC FILING DATE: 1-SEPTEMBER-1994
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: 08/037,230
CC FILING DATE: 26-MARCH-1993
CC PRIOR APPLICATION DATA: PCT/US92/04354
CC APPLICATION NUMBER: 07/607,043
CC FILING DATE: 12-DECEMBER-1991
CC PRIOR APPLICATION DATA: 07/764,364
CC APPLICATION NUMBER: 07/728,838
CC FILING DATE: 9-JULY-1991
CC PRIOR APPLICATION DATA: 07/705,702
CC APPLICATION NUMBER: 07/705,702
CC FILING DATE: 23-MAY-1991
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Hanson, NO 361201man D.
CC REGISTRATION NUMBER: LUD 5355
CC REFERENCE/DOCKET NUMBER: LUD 5355
CC TELEPHONE: (212) 838-9200
CC TELEFAX: (212) 838-3884
CC INFORMATION FOR SEQ ID NO: 10:
CC DEFINITION: Nucleic acid
CC LENGTH: 4137 base pairs
CC TYPE: nucleic acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: genomic DNA
CC FEATURE:
CC FEATURE KEY: WAGE-21 gene
CC SEQUENCE 662 BP: 155 A; 244 C; 176 G; 87 T; 0 other:
CC Query Match Similarity 42.9%; Score 70; DB 7; Length 662;
CC Best Local Similarity 80.0%; Fred. No. 6,74e-36;
CC Mismatches 100; Conservative 0; Mismatches 24; Indels 1; Gaps 1;
CC Db 15 CCAGAGAGATCCATCCAGTCCACCCCTGCTGTGACACGACGAGTCCAGGGCGGCGATGT 73
CC QY 95 CCAGCGAGATCCCGGTCCTCCCTCTCTCTACCCGAGGAGACGACGATGCCCATGT 154
CC Db 74 GAGCCCACTGCTTCGCGTGTGGAGTGTGAGAGACGACGAGTATCTCGCCCTGACCAAC 133
CC QY 155 GAGCCCTCTCTGAGCATATGCTGTGTAGAGAGACGAGGATTTCTGAGGGCGC 214
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CC Db 134 CCCTG 138
CC QY 215 CCTGT 219
CC
CC RESULT
CC ID US-07-807-043B-10 STANDARD; DNA; UNC: 662 BP.
CC AC xxxxx
CC DE 01-JAN-1900
CC DE Sequence 10, Application US/07807043B.

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[illegible]

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ALIGNMENTS

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DEFINITION  Sequence 1 from patent US 5541104.
ACCESSION   124013
KEYWORDS    KIDWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 5674)
AUTHORS     Chen,Y., Stochert,E., Chen,X., Garin-Chesa,P., Rettig,W.J., van de
            Brugten,P., Bonn-falier,T. and Old,L.J.
TITLE        precursor mangel
JOURNAL      Patent: US 5541104-A 1 30-JUL-1996;
FEATURES     source
              /organism="unknown"
BASE COUNT   1276 a 1644 c 1569 g 1185 t
ORIGIN
Query Match      100.0%; Score 5674; DB 25; Length 5674;
Best Local Similarity 100.0%; Pred. No. 0.00e+00;
Matches 5674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

db      1  CCGGGGACACATGGCATCTCCCTCCCTACGACCCCACTCCCTCTTGAAGCACCC 60
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        Qy      61  ATCCAAACATCTTCAGCGCTACCCCTCCCGACGAGCAGCATCGGTCGACCGCTG 120

Qy      121  CTCTCAACCCAGGAGACCCAGGTCGCCCACTGTGAGGCGCACTGACTTGAGCATCTG 180
        Qy      121  CTCTCAACCCAGGAGACCCAGGTCGCCCACTGTGAGGCGCACTGACTTGAGCATCTG 180

Qy      240  TTATGAGACAGCAGGATGTTTCGGCTCTGAGCGGCGCGCTTGAGATCGGTGGAGGAGCGG 240

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 Db 2941. ACATAGGCTGCGGCGCTGTCGCGAGAGCTTCCGATTAAGCTGCGGATGATGATGATCAG 3000
 Qy 2941. ACATAGGCTGCGGCGCTGTCGCGAGAGCTTCCGATTAAGCTGCGGATGATGATGATCAG 3000
 Db 3001. AGCATAGGCTGCGGCGCTGTCGCGAGAGCTTCCGATTAAGCTGCGGATGATGATGATCAG 3060
 Qy 3001. AGCATAGGCTGCGGCGCTGTCGCGAGAGCTTCCGATTAAGCTGCGGATGATGATGATCAG 3060
 Db 3061. AGGAGAGGCTGTCGTCGAGAGAGCTGCGCTGAGCTAGTGAAGAGAGCTGCCAGGCG 3120
 Qy 3061. AGGAGAGGCTGTCGTCGAGAGAGCTGCGCTGAGCTAGTGAAGAGAGCTGCCAGGCG 3120
 Db 3121. GTGCGAGGATGAGGTGAGGACAGCAGGCGCACTCCACGAGCACTGATTCACATTCACAT 3180
 Qy 3121. GTGCGAGGATGAGGTGAGGACAGCAGGCGCACTCCACGAGCACTGATTCACATTCACAT 3180
 Db 3181. GTGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3240
 Qy 3181. GTGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3240
 Db 3241. ACCAGAGAGAGGCGAGACTCAGGCTGCTGCGAGGAATTAAGGCGCTGCTGAGGA 3300
 Qy 3241. ACCAGAGAGAGGCGAGACTCAGGCTGCTGCGAGGAATTAAGGCGCTGCTGAGGA 3300
 Db 3301. CAGAGAGGCTGATCTGATGAGAGGAGGATGCTCAGAGCTGACAGGCTGACAGCCCTCTG 3360
 Qy 3301. CAGAGAGGCTGATCTGATGAGAGGAGGATGCTCAGAGCTGACAGGCTGACAGCCCTCTG 3360
 Db 3361. GTAGCAGTGAAGAGCGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3420
 Qy 3361. GTAGCAGTGAAGAGCGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3420
 Db 3421. CTTCTGAGCTGACGAGACAGGAGCTGAGGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3480
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 Db 3721. GAGGAG 3780
 Qy 3721. GAGGAG 3780
 Db 3781. AGCTGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3840
 Qy 3781. AGCTGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3840
 Db 3841. CTTCTGAGCTGACGAGACAGGAGCTGAGGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3900
 Qy 3841. CTTCTGAGCTGACGAGACAGGAGCTGAGGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3900
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Db 3961. TATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 4020
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 Qy 4861. CAGGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 4920
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 Db 5041. TTAGGAGTGAAGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 5100
 Qy 5041. TTAGGAGTGAAGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 5100

[illegible]

[illegible]

TITLE	Isolated nucleic acid molecules useful in determining expression of a tumor rejection antigen precursor
JOURNAL FEATURES	Patent: US 5612001-A 17-MAR-1997;
SEQUENCE SOURCE	Accession/Organism: U000001.1; NC_000866.1; J=2200; /organism='unknown'
BASE COUNT	549 a 568 c 611 g 577 t
ORIGIN	
	Query Match 21.6%; Score 1225; DB 25: Length 2305;
	Best Local Similarity 84.1%; Pred. No. 0.00e+00;
	Matches 1397; Conservative 0; Mismatches 299; Indels 72; Gaps 32;
Dd	1 GGATCAGGCGCTGGCAGGAAAGGTGAGGCGCCCTGTGTGACGACGACGAGCAATTC 60
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Oy	3256 GATCAGGCGCTGGCAGGAAATATAGGGGCGTCTGTGGACACGAGGAGTGATGCC 3315
Dd	61 ACCCAAAGAGGCTGGAGCATCTACAGATCTGCAGCTACCTCTTTTAGCATGGGGGC 120
Oy	
Oy	3316 ACTGCAATGAGTGGGTGTGAGAGGCTGAGGCGACACTCTGTAGCTCATGAAGAGC 3375
Dd	121 TGAGGCTGTGTAAGTCTGCACCTGAGGCGCCATGATCTCTGTTCAGAGAGCTCA 180
Oy	
Oy	3376 CAGGGCTGTGTTGCGTGTGAGGCGTGGATGCTGAGGCTGAGGCTGAGGCTGAGA 3435
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Dd	241 TGCACAGGCTGTGTCGACGATGATCTTTCCTTGAATGCATCATATGCCGCCATC 300
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Oy	
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Dd	540 TTTTATTCAGGCTTCTCAGATGCTCTCTCTCTCTCAGGCGAGTGGGTCTCATGGC 599
Oy	
Oy	3776 TTCAGCTGAGGCTCTCAGACATGCTCTCTCTCTCTCCAGAGCGCTGGGTCTCATGGC 3835
Dd	600 CAGCTCTGCGCACTCTCTCTCTCTCTGTCGTCAGAGTGTCTATGTCTTGGAGAG 659
Oy	
Oy	3836 CAGCTCTGCGCACTCTCTCTCTCTGCTCTGAGAGAGATCATGTCTCTTGGAGAG 3895
Dd	660 AAGATGAGATCTCAAGCTCTGAGAGAGGCTTGCACACGAGAGAG- CCTTGGCGCTG 718
Oy	
Oy	3898 AAGATGTGATCTCAAGCTCTGAGAGAGGCTTGGGCCACAGAGAGCTGGGCTG 3955
Dd	719 GTGGATGTGATCTCAAGCTCTGAGAGAGGCTTGGGCCACAGAGAGCTGGGCTG 778
Oy	
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Dd	835 CAGGAGATCTGGCACTCTCTGCGCATCTGGTATCTTCAATGAGAGAGCATCATGAG 898
Oy	
Oy	4095 CAGGAGATCTGGCACTCTCTGCGCATCTGGTATCTTCAATGAGAGAGCATCATGAG 4114

[illegible]

RESULT .12
LOCUS
DEFINITION
ACCESSION
NID
KEYWORDS
SOURCE


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Db 61 CTGGGAATCCCTGGCTGGCTTTGCTGCTGCATGATGGGGCCCTGGATCTCTCCCA 120
Qy 3367 CTGAGAGCCAGAGGCTTGGCTTGGGCTGCGAGCTGAGGGCCCTGGATTTCTCTCC- 3425
Db 121 GGAATCAGAGCTCCAGACAGGAGTGGAGACTTGGCTGAGGCGAGTCTCTGAGT 180
Qy 3426 ----T--GGAGCTCAGAGACAGGAGTGGAGGCTTGGCTGAGAGCTATCTGAGT 3479
Db 181 CACAGAGTAGAGGGGCTCGATAGTATGCCAACGCTGAGGTTTGGCTTGGATGATCAACCA 240
Qy 3480 CACAGAGCAGAGATGACAGAGGCTGTCGACAGATGAATTTGGCTCGATGACACCA 3539
Db 241 AGGCGCCCACTGGCTAGACACACT--GGATCCGAGAGGCTTGGCTCACCTCACTATAC 299
Qy 3540 AGGCGCCCACTGGCCAGACACACTAGGACTCAGAGCTGAGGCTTGGCTCACCT- 3598
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Db 360 CTTCTGAGAGTCTGAGAGGAGAGAGTGAAGTGGAGAGACAGAGGCGCCG--G--AG- 414
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Db 653 CTGGTGGTGGAGGCTCTCTCTACTGAGGAGAGAGGCTCTCTCTCTCTCTCTGAT 712
Qy 3953 CTGGTGGTGGAGGCTCTCTCTACTGAGGAGAGAGGCTCTCTCTCTCTCTCTGAT 3994
Db 713 GTAGTGAAGTCAAGCTGGGAGGAGTCTCTCTGCGAGTCAACAGATCTCTCCAGAGT 772
Qy 3995 GTCTTGG--G--CACTCTGAGAGAGTGGCCACTCTGTGGGTCAAGATCTCTCCAGAGT 4051
Db 773 CTTCAAGGAGCTCCAGCTCCCACTACATGAGTACCTCTCTGGAGCAATCTTAT 832
Qy 4052 CTTCAAGGAGCTCCAGCTCCCACTACATGAGTACCTCTCTGGAGCAATCTTAT 4111
Db 833 GAGGATCTCAAGCAACAGAGAGGAGGAGGCGCAAGCACTCTCTGAGTGGAGTCTGAG 892
Qy 4112 GAGGATCTCAAGCAACAGAGAGGAGGAGGCGCAAGCACTCTGAGTGGAGTCTGAG 4171
Db 893 TTCCAGGAGCACTCAATGAGAGGTGGGCAAGTGGTCAATTTCTCTGCTC 943
Qy 4172 TTCAGGAGTATCTCAAGAGGTGGGCAAGTGGTCAATTTCTCTGCTC 4222

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Search completed: Tue Apr 7 20:33:44 1998
 Job time: 4483 secs.

4501	CAATCTCTCTGAGGAGAAATCTGGGAGAGCTGAGTGTATGTAGAGTGTATATGGAG	1560
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4561	GGAGCAGAGTGCTATATGGGAGAGCCAGAGAGTCTCAACCAAGATTTGGTGAGAGAA	1620
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4621	GTACTGTGGATGAGGAGAGTCTGGGAGAGATCTCCGACCAAGATTTGGTGAGAGAA	1680
4621	GTACTGTGGATGAGGAGAGTCTGGGAGAGATCTCCGACCAAGATTTGGTGAGAGAA	1680
4621	GTACTGTGGATGAGGAGAGTCTGGGAGAGATCTCCGACCAAGATTTGGTGAGAGAA	1680
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4681	CCAGAGGCGCTCTGGTGAACCAAGCTATGTGAAGAGCTGTATGTATGTATCGATGCTAGT	1740
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4741	CGAAGAGCTTGGTCTTTCTTCATCTCCGCTGGGAGAGCTTTGATGAGAGAGAGAG	1800
4741	CGAAGAGCTTGGTCTTTCTTCATCTCCGCTGGGAGAGCTTTGATGAGAGAGAGAG	1800
4741	CGAAGAGCTTGGTCTTTCTTCATCTCCGCTGGGAGAGCTTTGATGAGAGAGAGAG	1800
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5461	CCAGCCTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT	2520
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5521	TTCTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT	2580
5521	TTCTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT	2580
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[illegible]

Db 301 MNTAGAGGCGCAAAATTCCTGTGAGGAGGCTGTGAGGAGCTGTGGTGGGAGCTTC 360
 Qy 301 AGATAGAGGCGCAAAATTCCTGTGAGGAGGCTGTGAGGAGCTGTGGTGGGAGCTTC 360
 Db 361 TGAGGCTGTGGGCGCAAAATTCCTGTGAGGAGGCTGTGAGGAGCTGTGGTGGGAGCTTC 420
 Qy 361 TGAGGCTGTGGGCGCAAAATTCCTGTGAGGAGGCTGTGAGGAGCTGTGGTGGGAGCTTC 420
 Db 421 CTGCGTGTGAGGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 480
 Qy 421 CTGCGTGTGAGGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 480
 Db 481 CAGTGTGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 540
 Qy 481 CAGTGTGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 540
 Db 541 CCGCATCTGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 600
 Qy 541 CCGCATCTGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 600
 Db 601 CCGCATCTGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 660
 Qy 601 CCGCATCTGAGGAGGCTGTGAGGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 660
 Db 661 CAGGCG 720
 Qy 661 CAGGCG 720
 Db 721 CAGGCG 780
 Qy 721 CAGGCG 780
 Db 781 GAGGCG 840
 Qy 781 GAGGCG 840
 Db 841 CTCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 900
 Qy 841 CTCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 900
 Db 901 GAGGCG 960
 Qy 901 GAGGCG 960
 Db 961 GTCTCTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1020
 Qy 961 GTCTCTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1020
 Db 1021 TCTCTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1080
 Qy 1021 TCTCTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1080
 Db 1081 CAGGCG 1140
 Qy 1081 CAGGCG 1140
 Db 1141 CAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1200
 Qy 1141 CAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1200
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 Qy 1321 CCGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1380
 Db 1381 GGTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1440
 Qy 1381 GGTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1440

Qy 1381 GGTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1440
 Db 1441 TGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1500
 Qy 1441 TGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1500
 Db 1501 ATTCAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1560
 Qy 1501 ATTCAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1560
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 Qy 1921 CAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 1980
 Db 1981 CAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 2040
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 Db 2401 CAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 2460
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 Db 2461 CAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 2520
 Qy 2461 CAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTGTGAGGAGGCTTC 2520

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 Db 2521. CAGCGAGGAAGTTGGGGGGCCCTCAGGAGATGGGGTCTTGGGTAAAGGGGGATGCT 2580
 Qy 2522. CAGTCTGCTAGATATGACCTGTGCTGGCGGGTGTACCTGATGATCTCACTTCT 3660
 Db 2523. CTTCAAGGTTTTCAGGAGGACGCCCAACAGAGGACAGGATATCCCTGGAGGCCAGAG 3720
 Qy 2581. ACTGCTGATCAGGAATATGGGGTGTGAGGAGCAGAGCGCTGGGGGAATAAGATGAT 2640
 Db 2582. ACTGCTGATCAGGAATATGGGGTGTGAGGAGCAGAGCGCTGGGGGAATAAGATGAT 2640
 Qy 2583. ACTGCTGATCAGGAATATGGGGTGTGAGGAGCAGAGCGCTGGGGGAATAAGATGAT 2640
 Db 2641. GAGCAGCAGAGGCTATTGGAATCAGACCCAGAACAAAGGGTCAAGCTTGGACAC 2700
 Qy 2642. GAGCAGCAGAGGCTATTGGAATCAGACCCAGAACAAAGGGTCAAGCTTGGACAC 2700
 Db 2701. TCACAGAGATGTGGCTCTTTTCACTCTGTTCACAGATCTGAGGCGAGGAGCT 2760
 Qy 2702. TCACAGAGATGTGGCTCTTTTCACTCTGTTCACAGATCTGAGGCGAGGAGCT 2760
 Db 2761. CATCTCTCAGAGGTGTACTAGTCAAGCTAGGAGACCCATCACTGTCTTAAGACAGAG 2820
 Qy 2762. CATCTCTCAGAGGTGTACTAGTCAAGCTAGGAGACCCATCACTGTCTTAAGACAGAG 2820
 Db 2821. GTTCCAGGATATGCTGATCTGGGTGAGAGCATGAGGAGAGCTGAGGTACAGCAG 2880
 Qy 2822. GTTCCAGGATATGCTGATCTGGGTGAGAGCATGAGGAGAGCTGAGGTACAGCAG 2880
 Db 2881. GACACAGACCTCAGGAGAGCTACAGAAATAGAGCTTGGCTCTGTTCACCCAGAG 2940
 Qy 2882. GACACAGACCTCAGGAGAGCTACAGAAATAGAGCTTGGCTCTGTTCACCCAGAG 2940
 Db 2941. AAGATGGCTTGGCGCTCTCCAGAGGCTTTCGGTATCTTGGGATATTGATGTAGGG 3000
 Qy 2942. AAGATGGCTTGGCGCTCTCCAGAGGCTTTCGGTATCTTGGGATATTGATGTAGGG 3000
 Db 3001. ACGGGAGAGGCTTGTGTGAGAGAGCTTGGCTCAGTGTAGAGGGAGCTGTGAGGCC 3060
 Qy 3002. ACGGGAGAGGCTTGTGTGAGAGAGCTTGGCTCAGTGTAGAGGGAGCTGTGAGGCC 3060
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 Qy 3062. GTCCAGAGATGAGTGTAGAGAGCAGAGAGAGAGAGCTGACCGAGAGCATGATGAT 3120
 Db 3121. GAATTTGATATCTTGGCTGCTGCGCAGAGAGAGAGAGCTGACCGAGAGCATGAT 3180
 Qy 3122. GAATTTGATATCTTGGCTGCTGCGCAGAGAGAGAGAGCTGACCGAGAGCATGAT 3180
 Db 3181. GTCCCTCTGCTGCTCCATCTATACAGTGTAGTGAAGTCTGATTTGGATTTCTCAG 3240
 Qy 3182. GTCCCTCTGCTGCTCCATCTATACAGTGTAGTGAAGTCTGATTTGGATTTCTCAG 3240
 Db 3241. ACCAGAGAGAGAGAGATCTGAGGCTCTCCAGAGAAATATAGGGGCTCTGTGTAGAA 3300
 Qy 3242. ACCAGAGAGAGAGAGATCTGAGGCTCTCCAGAGAAATATAGGGGCTCTGTGTAGAA 3300
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 Qy 3302. CAGAGAGGATGATCACTGATGAGTGGGGATGTACAGAGTCAAGGCAAGCCCTCTCTG 3360
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 Qy 3362. GTAGAGAGTCACTGCTGATGAGTGGGGATGTACAGAGTCAAGGCAAGCCCTCTCTG 3420
 Db 3421. GTTCTTGGAGTCCAGAGAGCAGGAGTGGGCTGTGTCTGAGACAGATCTTCACTGAGTC 3480
 Qy 3422. GTTCTTGGAGTCCAGAGAGCAGGAGTGGGCTGTGTCTGAGACAGATCTTCACTGAGTC 3480
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 Qy 3482. ACAGACAGAGAGTGCACAGGTTGGCCAGAGTGATGTTTGGCTGATGTACAGACAA 3540
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 Qy 3542. GGGGCCCCCTTCCACAGAGACATAGAGATCCACAGAGTGTGGCTCACTCCCTACTG 3600

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 Qy 3662. TCAGTCTGTAGATGAGACTGTGCTTGGCGGGTGTACCTGAGTACCTCTCACTTCT 3660
 Db 3663. CTTCAAGGTTTTCAGGAGGACGCCCAACAGAGGACAGGATATCCCTGGAGGCCAGAG 3720
 Qy 3664. CTTCAAGGTTTTCAGGAGGACGCCCAACAGAGGACAGGATATCCCTGGAGGCCAGAG 3720
 Db 3721. GAGCAGCAGAGAGATCTGTGATAGGCTCTTCCCGAGGCTTGTATGAGCTCAAGTCTC 3780
 Qy 3722. GAGCAGCAGAGAGATCTGTGATAGGCTTGTGATAGGCTTGTATGAGCTCAAGTCTC 3780
 Db 3781. ACTGAGGCTCTCAACAGTCCCTCTTCCCGAGGCTTGGGTCTTCAATGCCAGCT 3840
 Qy 3782. ACTGAGGCTCTCAACAGTCCCTCTTCCCGAGGCTTGGGTCTTCAATGCCAGCT 3840
 Db 3841. CTGCGCAGCTCTGCTGCTGCTGCTGCTGACGAGCTCATGCTGTCTTATGAGAGAG 3900
 Qy 3842. CTGCGCAGCTCTGCTGCTGCTGCTGACGAGCTCATGCTGTCTTATGAGAGAG 3900
 Db 3901. TCTGCACTCAAGCTGTAGAGAGCTTGAAGGCCCAAGAGGCCCTGGGCTGTGTG 3960
 Qy 3902. TCTGCACTCAAGCTGTAGAGAGCTTGAAGGCCCAAGAGGCCCTGGGCTGTGTG 3960
 Db 3961. TGTCAAGCTTGCACATCTGCTCTGCTGCTGCTGGGCAAGCTGTGAGGTGTC 4020
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 Db 3963. TGTCAAGCTTGCACATCTGCTCTGCTGCTGCTGCTGGGCAAGCTGTGAGGTGTC 4020
 Qy 3964. TGTCAAGCTTGCACATCTGCTCTGCTGCTGCTGCTGGGCAAGCTGTGAGGTGTC 4020
 Db 4021. CACTGTGGGTCAAGAGATCTCCCGAGAGCTCTCAGGAGCTCCGCTTCCACATC 4080
 Qy 4022. CACTGTGGGTCAAGAGATCTCCCGAGAGCTCTCAGGAGCTCCGCTTCCACATC 4080
 Db 4081. CATCACTCACTCCAGAGAGACCCAGTGAAGGGTCTCAGAGAGCTCAAGAGAGG 4140
 Qy 4082. CATCACTCACTCCAGAGAGACCCAGTGAAGGGTCTCAGAGAGCTCAAGAGAGG 4140
 Db 4141. GCGAGCACTCTGTGATGGAGTCTGTTTCCGAGAGTAACTACTAAGAGTGGC 4200
 Qy 4142. GCGAGCACTCTGTGATGGAGTCTGTTTCCGAGAGTAACTACTAAGAGTGGC 4200
 Db 4201. TGATTTGGTTTGTCTCTCAAAATCGAGCGAGGAGCACTCAAGAGCGA 4260
 Qy 4202. TGATTTGGTTTGTCTCTCTCAAAATCGAGCGAGGAGCACTCAAGAGCGA 4260
 Db 4261. ATCTGAGAGTGTCTCAAAAATCAGAGCACTGTTTCTTGAGATTTGGCAAGC 4320
 Qy 4262. ATCTGAGAGTGTCTCAAAAATCAGAGCACTGTTTCTTGAGATTTGGCAAGC 4320
 Db 4321. CTCTGAGTCTTGGAGTCTTGGCATGTGATGTGAAGAGAGACCCACCGCCA 4380
 Qy 4322. CTCTGAGTCTTGGAGTCTTGGCATGTGATGTGAAGAGAGACCCACCGCCA 4380
 Db 4381. GCGTCTATGTGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTG 4440
 Qy 4382. GCGTCTATGTGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTG 4440
 Db 4441. GATGAGCGGAG 4500
 Qy 4442. GATGAGCGGAG 4500
 Db 4501. CGATGCTCTTGGAG 4560
 Qy 4502. CGATGCTCTTGGAG 4560
 Db 4561. GAGACAGATGCTGTATGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4620
 Qy 4562. GAGACAGATGCTGTATGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4620
 Db 4621. GTACTGTGAGTGTGCTGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4680
 Qy 4622. GTACTGTGAGTGTGCTGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4680

Query Match				42.6%	Score 2419;	DB 1:	Length 2419;
Best Local Similarity 100.0%;				Pred. No. 0.00e+00;			
Hatches 2419;				Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Db	1	GGATCGAGCGCTGCCAGAAAATATAGGGCCCTGCTGGAGACAGAGGGGTATCC	60				
Qy	3356	GTCTAGGCTCTGCTGGAGAAATATAGGGCCCTGCTGGAGACAGAGGGGTATCC	3315				
Db	61	ACTGCTAGAGTGGGATATACAGATCTCAGCCACCTCTCTGTAGCATGAGAC	120				
Qy	3316	ACTGCTAGAGTGGGATATACAGATCTCAGCCACCTCTCTGTAGCATGAGAC	3375				
Db	121	CAGGGTGTCTGGTCTGTGACCATAGGGCCCGTGGAATCTCTCTGTGAGCTCA	180				
Qy	3376	CAGGGTGTCTGGTCTGTGACCATAGGGCCCGTGGAATCTCTCTGTGAGCTCA	3425				
Db	181	GGAGCAGAGTGAAGCTCTGGTCTGAGACATATCTCAGTGCACAGAGAGATG	240				
Qy	3416	GGAGCAGAGTGAAGCTCTGGTCTGAGACATATCTCAGTGCACAGAGAGATG	3495				
Db	3461	CHAGGGTGTCCAGGTGAGATTTGGCTGTGAGACATATCTCAGTGCACAGAGATG	3495				
Qy	3466	CHAGGGTGTCCAGGTGAGATTTGGCTGTGAGACATATCTCAGTGCACAGAGATG	3555				
Db	301	CAGACATATAGATATGATATGATATGATATGATATGATATGATATGATATG	360				
Qy	3358	CAGACATATAGATATGATATGATATGATATGATATGATATGATATGATATG	3615				
Db	361	CAGAGTGTGGGAGTGTATACAGATCTGAGCTTCACTTCTACTGTCTGAGTCT	420				
Qy	3616	CAGAGTGTGGGAGTGTATACAGATCTGAGCTTCACTTCTACTGTCTGAGTCT	3675				
Db	421	GGGACAG	480				
Qy	3676	GGGACAG	3735				
Db	481	GATCTGTAGTGTAGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	540				
Qy	3736	GATCTGTAGTGTAGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	3745				
Db	541	CACACTTCTCTCTCCACAGGCTGTGGGTGTGTGTGTGTGTGTGTGTGTGTGT	600				
Qy	3796	CACACTTCTCTCTCCACAGGCTGTGGGTGTGTGTGTGTGTGTGTGTGTGTGT	3855				
Db	601	GGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCT	660				
Qy	3856	GGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCTGTGGCT	3915				
Db	661	TGAG	720				
Qy	3916	TGAG	3975				
Db	721	CT	780				
Qy	3976	CT	4035				
Db	781	AGATCTCCCGCAGAGTCTTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	840				
Qy	4036	AGATCTCCCGCAGAGTCTTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	4155				
Db	841	CAG	900				
Qy	4096	CAG	4155				
Db	901	TATCTCTGATCTGTCTGTGAGAGATATCTAGTGTGTGTGTGTGTGTGTGTGT	960				
Qy	4156	TATCTCTGATCTGTCTGTGAGAGATATCTAGTGTGTGTGTGTGTGTGTGTGT	4215				
Db	961	TGAGT	1020				
Qy	4216	TGAGT	4275				

Human melanoma antigen, MAGE-1, peptide(s) - useful for stimulating immune response against melanoma

Example 1. Plasmid 5990 was produced by inserting the ORF545 encodes R70909 human melanoma antigen MAGE-1, it was used to produce the C-terminal MAGE-1 peptides described in R70915 to R70969. These peptides are useful for defining epitopes that recognize a HLA-restricted cytotoxic lymphocyte activity against melanoma. A vaccine containing MAGE-1 peptide epitopes was administered as a vaccine to patients susceptible to MAGE associated tumors, e.g. melanomas.
Sequence 2420 BP: 562 A: 382 C: 677 G: 599 T:

Query Match	42.5%	Score 2413;	DB 1;	Length 2420;
Best Local Similarity	100.0%	pred. No.	0.00e+00;	

Matches	2419;	Conservative	0;	Mismatches	0;	Indels	1;	Gaps	1;
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 Db 3191 AGGTGAGGCGCTGAGTGAAGACACAGGAGACCTCCACCAAGTAGAGTGGGACCTCA 2050
 Qy 3271 TATATAGGCGCTGCTGTGAGACAGAGGGGATCATCACTCAAGTGGGATGGATGCTCA 3338
 Db 3051 CAGAGCTTGGGACACAGCTCTGAGAGCTTCTGGGAAATCGCTGGCTGCTGAGCTGCA 2110
 Qy 3339 CAGGTGACCGCCACCTCTCTGTAGCTCAAGAGAGCGGCTCTCTGTGCTGTGCA 3398
 Db 2111 CACTGAGGCGCGCTGATCTCTCTCCAGAGATCAGAGGCTCCAGGACACAGGAGTAG 2170
 Qy 3371 GCTTGGGCTGAGTGGATCT 3451
 Db 2191 GCTTGGGCTGAGTGGATCT 3451
 Qy 3452 GCTTGGGCTGAGTGGATCT 3511
 Db 2230 ACTGAGAGTGGCTGAGTGGATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 2288
 Qy 3512 AGTGAAGTGGCTGAGTGGATCT 3571
 Db 2289 CAGAGGCGCTGAGTGGATCT 2348
 Qy 3572 CACAGAGTGGCTGAGTGGATCT 3630
 Db 2349 GCTTGGGCTGAGTGGATCT 2408
 Qy 3631 GCTTGGGCTGAGTGGATCT 3688
 Db 2409 AGTGAAGTGGCTGAGTGGATCT 2467
 Qy 3689 CAGAGGCGCTGAGTGGATCT 3748
 Db 2468 TCAAGGCTCTCAAGTGTCA-GTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 2525
 Qy 3749 GCCTTGTGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 3808
 Db 2526 TCCGAGGCTGTGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 2585
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 Db 2586 ACAGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 2645
 Qy 3869 ACAGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 3928
 Db 2646 GAGGCGCTGAGTGGATCT 2705
 Qy 3929 GAGGCGCTGAGTGGATCT 3978
 Db 2706 CAGAGGCTGTGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 2765
 Qy 3979 CT-CTCTCTCT-CTCTCTCT-CT-CT-CT-CT-CT-CT-CT-CT-CT-CT-CT-CT-CT-CT 4027
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 Db 2886 AGTGTGTGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 4207
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 Db 4208 GTTGTGTGTGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 4267
 Qy 3006 GAGTGTGTGAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCAAGTGTCA 3065
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 Db 3306 AGTGTCTTGGGATCAGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3365
 Qy 4568 AGTGTCTTGGGATCAGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 4627
 Db 3366 GAGTCAAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3425
 Qy 4628 GAGTCAAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 4686
 Db 3426 GAGTCAAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3485
 Qy 4687 GAGTCAAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 4746
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 Qy 4747 GAGTCAAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 4806
 Db 3546 TCAAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3605
 Qy 4807 TCAAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 4866
 Db 3606 CCGACAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3665
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 Db 3666 AGAGGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3725
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 Qy 4985 TTTCTCTCTGTGATGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAC 5044
 Db 3785 GAGTCAAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3844
 Qy 5045 GAGTCAAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 5102
 Db 3845 AGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3904
 Qy 5103 AGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 5160
 Db 3905 AGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 3963
 Qy 5161 AGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 5220
 Db 3964 T-AC-AGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 4020
 Qy 5221 AGAGTGTGCGGAGGAGTGTCTGATGTCTTGGGATGTGCGGAGGAGGAGGAC 4078
 Db 4078 TTTT-AAA-ATATGCTG-TT-TG-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT 4086
 Qy 5281 TTTT-AAA-ATATGCTG-TT-TG-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT 5340
 Db 4086 TTTT-AAA-ATATGCTG-TT-TG-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT-TT 5400
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[illegible]

db	1918	TTGTGATTTGGGACATATAACACGACGTGA-GTA---AGTATT-T-AGAGTGTGAAT	1971
db	1919		
db	1920		
db	1921	TTGTGATTTGGGACATATAACACGACGTGA-TAGTCTTAAATATGGAAATGACG	5203
db	1922		
db	1923	TTGTGATTTGGGACATATAACACGACGTGA-TAGTCTTAAATATGGAAATGACG	5203
db	1924	TGACC--G-TGGATAG--GTG--AGTAAATTAAGAGATCTTAATCCGCCCTATGCC	2025
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Query Match 24.7%; Score 1399; DB 1; Length 2531;
Best Local Similarity 84.3%; Pred. No. 0.00e+00;

[illegible]

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 Qy 3776 TTCTACGTAGGCTTCACACATCTCTCTCTCCAGGACAGGGGTCTCCATGCG 3835
 Db 600 CAGCTCTCCGACACCTCTGCTGGGGACAGACAGCTCATGCTCTGTAGGAG 659
 Qy 3836 CAGCTCTCCGACACCTCTGCTGGGGACAGACAGCTCATGCTCTGTAGGAG 3895
 Db 660 AAGAGTCACTGACAGCTCTGCTGGGGACAGACAGCTCATGCTCTGTAGGAG 718
 Qy 3896 AAGAGTCACTGACAGCTCTGCTGGGGACAGACAGCTCATGCTCTGTAGGAG 3955
 Db 719 GTGGAGTGGAGCTGACACTACTGAGGAGAGAGCTGTGCTCTCTCTCTCTG 778
 Qy 3956 GTGGAGTGGAGCTGACACTACTGAGGAGAGAGCTGTGCTCTCTCTCTCTG 3994
 Db 779 GTCCAGGACCTCTGGGAGAGGTGCTGTGCTGACAGCTCTCTCAGAGCTCT 838
 Qy 3995 GTCTGTGGGACCTCTGGGAGAGGTGCTGTGCTGACAGCTCTCTCAGAGCTCT 4054
 Db 839 CAGGAGAGCTCCGCTACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 898
 Qy 4055 CAGGAGAGCTCCGCTACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4114
 Db 899 GGTCTGACGACACGACGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 958
 Qy 4115 GGTCTGACGACCTGACGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 4174
 Db 959 GAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1018
 Qy 4175 GAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 4234
 Db 1019 GTCCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1078
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 Db 1079 TGTCTCTGAGAGCTCTGCGAAGGCTCTGAGCTCTGAGCTCTGAGCTCTG 1138
 Qy 4295 TGTCTCTGAGAGCTCTGCGAAGGCTCTGAGCTCTGAGCTCTGAGCTCTG 4354
 Db 1139 GTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1198
 Qy 4355 GTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 4414
 Db 1197 TATGAGCTCTGCTGGT--TATGATGATCATCCGAGAGGCTCTGATGATGTC 1254
 Qy 4415 TATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 4474
 Db 1255 TTGGGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1314
 Qy 4475 TTGGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 4534
 Db 1315 GGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1374
 Qy 4535 AGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 4594
 Db 1375 CTGACGAGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1434
 Qy 4595 CTGACGAGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 4654
 Db 1435 CTGACGAGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1494
 Qy 4655 CTGACGAGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1554
 Db 1495 TATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1554
 Qy 4715 TCTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 4774
 Db 1545 AGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1604
 Qy 4775 AGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 4834

Db 1605 CGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1664
 Qy 4835 CGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 4893
 Db 1665 TGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1724
 Qy 4894 TGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 4951
 Db 1725 TGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1784
 Qy 4952 TGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 5011
 Db 1785 GTTCTGTCTATGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1843
 Qy 5012 GTTCTGTCTATGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 5071
 Db 1844 CACGACATGCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1903
 Qy 5072 CACGAC--GTTCTGTGATGATGATGATGATGATGATGATGATGATGATGATG 5129
 Db 1904 AAATCCATCTCTATGTTGGATGATGATGATGATGATGATGATGATGATGATGATG 1961
 Qy 5130 AAATCCATCTCTATGTTGGATGATGATGATGATGATGATGATGATGATGATGATG 5189
 Db 1962 T--AGAAATGTGGA--TGAGC--AGTAAATGATGATGATGATGATGATGATGATGAT 2018
 Qy 5190 TGAAATAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2249
 Db 2018 TCTGTGCTCTATGAC--TGAGCTATGCTGATGATGATGATGATGATGATGATGATGAT 2077
 Qy 5250 TCTGTGCTCTATGAC--TGAGCTATGCTGATGATGATGATGATGATGATGATGATGAT 5307
 Db 2078 TTTCTTGGCTTCTTGATGATGATGATGATGATGATGATGATGATGATGATGATG 2137
 Qy 5308 TTTCTTGGCTTCTTGATGATGATGATGATGATGATGATGATGATGATGATGATG 5367
 Db 2138 TCACTGGCTCATTTATCTCTATGCTAGGATGATGATGATGATGATGATGATGATGAT 2197
 Qy 5368 TCACTGGCTCATTTATCTCTATGCTAGGATGATGATGATGATGATGATGATGATGAT 5427
 Db 2198 TAGTGAGATGCTAGGTAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2257
 Qy 5428 TAGTGAGATGCTAGGTAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 5487
 Db 2258 GCGAGGATGCTAGGTAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2303
 Qy 5488 GCGAGGATGCTAGGTAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 5534

Search completed: Tue Apr 7 20:51:08 1998
 Job time : 308 secs.

[illegible]

CC CITY: New York City
 CC ZIP: 10022
 CC COMPUTER READABLE FORM:
 CC MEDLINE FILE: Diskette, 5.25 inch, 360 kb storage
 CC OPERATING SYSTEM: PC-DOS
 CC SOFTWARE: WordPerfect
 CC CONTACT PERSON: NAME
 CC APPLICATION NUMBER: 05/07/807.043B
 CC FILING DATE: 19911212
 CC CLASSIFICATION: 424
 CC PRIORITY DATE: 07/64.364
 CC APPLICATION NUMBER: 07/64.364
 CC FILING DATE: 23-SEPTEMBER-1991
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 CC PRIOR APPLICATION DATA: 07/095.702
 CC FILING DATE: 1983-MAY-1991
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Hanson, No. 534274man D.
 CC FIRM: HANSON, No. 534274man D.
 CC REFERENCE/DOCKET NUMBER: JLD 251.3
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (212) 688-5200
 CC FAX: (212) 688-5200
 CC INFORMATION FOR SEQ ID NO: 8:
 CC SEQUENCE CHARACTERISTICS:
 CC LENGTH: 5674 base pairs
 CC STRANDNESS: singular
 CC TOPOLOGY: linear
 CC ORGANISM: *Mus musculus*
 CC STRAIN: MAGE-1
 CC NAME/KEY: MAGE-1 gene
 CC Sequence 5674 BP; 1275 A; 1644 C; 1569 G; 1185 T; 0 other;

Query Watch 100.0%; Score 5674; DB 4; Length 5674;
 Best Local Similarity 100.0%; Pred. No. 0.00e+00;

Matches 5674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 Qy 1 CCGGGGACACATGGATCTCTCCCTACACCCCACTCCCTCTTACGCCACC 60
 Db 61 ATCCAAATCTCAACGAGACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 120
 Qy 61 ATCCAAATCTCAACGAGACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 120
 Db 121 CTCTCAACAGGAGACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 180
 Qy 121 CTCTCAACAGGAGACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 180
 Db 181 TTAGAGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 240
 Qy 181 TTAGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 240
 Db 241 CCGAGCTCTGTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 300
 Qy 241 CCGAGCTCTGTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 300
 Db 301 AGATAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 360
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 Db 361 TCAGGCTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 420
 Qy 361 TCAGGCTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 420
 Db 421 CTCCTGCTGTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 480
 Qy 421 CTCCTGCTGTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 480

Qy 421 CTCCTGCTGTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 480
 Db 481 CATCTGCTAGATCTCTCAAGAGGGCTGAGGGTCCCTTAAAGACCCACTCGGTGACCAAC 540
 Qy 481 CATCTGCTAGATCTCTCAAGAGGGCTGAGGGTCCCTTAAAGACCCACTCGGTGACCAAC 540
 Db 541 CCCACATCTGATCTCTCACTCCGCTGAGCCACACCCCTCTGATATGATCTCAACCCCA 600
 Qy 541 CCCACATCTGATCTCTCACTCCGCTGAGCCACACCCCTCTGATATGATCTCAACCCCA 600
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 Db 781 GAAGAGAGGATTTCCATCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 840
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 Db 841 CTCTGCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 900
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 Db 901 GAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 960
 Qy 901 GAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 960
 Db 961 GGTCTGAGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCT 1020
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 Qy 1021 TTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1080
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 Qy 1381 GGTGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1440
 Db 1441 TGAACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1500
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 Db 1501 ATGCACTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1560
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 Oy 1861 CAGCTACATATCCATATCTACCTCTACCTCTACCTCTACCTCTACCTCTACCTCTACCTCTAC 1920
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 Db 1981 GGGTGTGATGGAGAGAGGCTCTGAACGGGCTCAGGAGCAGAGGAGGAGGCGCTAC 2040
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 Oy 2041 TCGAGATAGAGAGGCTCTGAGAGGCTCTGAGAGGCTCTGAGAGGCTCTGAGAGGCTCTGAGAG 2100
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 Oy 2461 TTATGATCTCTAGGAGGAGGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAG 2520
 Db 2521 CAGGAGCAGAGTCTGAGAGGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAG 2580
 Oy 2521 CAGGAGCAGAGTCTGAGAGGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAG 2580
 Db 2581 ACTCATCTCTGAGAGTCTGAGAGGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAGTCT 2640
 Oy 2581 ACTCATCTCTGAGAGTCTGAGAGGAGTCTCAGAGTCTCAGAGTCTCAGAGTCTCAGAGTCT 2640
 Db 2641 GAGACACAGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 2700
 Oy 2641 GAGACACAGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 2700
 Db 2701 TCGAGAGAGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 2760
 Oy 2701 TCGAGAGAGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 2760
 Db 2761 CAGCTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCT 2820
 Oy 2761 CAGCTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCT 2820
 Db 2821 CATCTCTCAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCT 2880
 Oy 2821 CATCTCTCAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCT 2880
 Db 2881 GAGCAGAGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 2940
 Oy 2881 GAGCAGAGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 2940
 Db 2941 AGCTATGGCTGGGCGCTCTGCGAGGCTCTGCGAGTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 3000
 Oy 2941 AGCTATGGCTGGGCGCTCTGCGAGGCTCTGCGAGTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 3000
 Db 3001 AGGAGAGGCTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 3060
 Oy 3001 AGGAGAGGCTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 3060
 Db 3061 CTGCGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAG 3120
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 Db 3121 GANTTTGATATCTCTGCT 3180
 Oy 3121 GANTTTGATATCTCTGCT 3180
 Db 3181 GTCCCT 3240
 Oy 3181 GTCCCT 3240
 Db 3241 ACACAGAAAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAG 3300
 Oy 3241 ACACAGAAAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAG 3300
 Db 3301 CAGAGGGGCT 3360
 Oy 3301 CAGAGGGGCT 3360
 Db 3361 GTAGCATAGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCT 3420
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 Db 3721 GAGCAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAGGAGTCTGAGAG 3780

STREET: 805 Third Avenue
CITY: New York City
STATE: New York
ZIP: 10022
COMMUNICATIONS FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM

OPERATING SYSTEM: PC-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 1911212

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 1911212

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
FILING DATE: 9 JULY 1991

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 21-MAY-1991

ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 3474454a D.
REFERENCE/DOCKET NUMBER: LID 253.3

TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 838-3884
TELEFAX: (212) 838-3884

INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
TYPE: NUCLEIC ACID

STANDARDS: singular
MOLECULE TYPE: linear
SEQUENCE TYPE: genomic DNA

Sequence 2419 BP: 562 A; 581 C; 677 G; 599 T; 0 other;
Query Match: 42.64; Score 2419; BP 4; Length 2419;
Best Local Similarity 100.0%; Prod No. 0.00e+00;
Matches 2419; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 GATGCTGAGTGGAGCTTGTAGAGTCTCCAGGTCTCAGTCTTCCAGCTGAGGCTCTCA 540

3736 GATGCTGAGTGGAGCTTGTAGAGTCTCCAGGTCTCAGTCTTCCAGCTGAGGCTCTCA 3795

541 CACATCTCTCTCTCCCGAGGCTCTGGAGTCTTATGCTCCAGCTCTCTCCAGCTCTCA 600

3791 CACATCTCTCTCTCCCGAGGCTCTGGAGTCTTATGCTCCAGCTCTCTCCAGCTCTCA 3855

606 CACATCTCTCTCTCCCGAGGCTCTGGAGTCTTATGCTCCAGCTCTCTCCAGCTCTCA 660

3856 GCTCTCTCTCTCTCCCGAGGCTCTGGAGTCTTATGCTCCAGCTCTCTCCAGCTCTCA 3915

720 TGAAGAGGCTCTTGAAGGCTCCACAGAGGCTCTGGAGTCTTATGCTCCAGCTCTCA 720

3916 TGAAGAGGCTCTTGAAGGCTCCACAGAGGCTCTGGAGTCTTATGCTCCAGCTCTCA 3975

721 CT 780

3976 CT 4035

781 AGATCT 840

4036 AGATCT 4095

841 CACATCT 900

4096 CACATCT 4155

901 TATCT 960

4156 TATCT 4215

961 TCT 1020

4216 TCT 4275

1021 CACATCT 1080

4276 CACATCT 4335

1081 GCTGCT 1140

4336 GCTGCT 4395

1141 CACATCT 1200

4396 CACATCT 4455

1201 AGCT 1260

4456 AGCT 4515

1261 GGAATCT 1320

4516 GGAATCT 4575

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1441 GGAATCT 1500

4696 GGAATCT 4755

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Oy 3496 CACACGGGCTGTGCGGACAGTGAATGTTTGGCTTAAATGACACAGAGGGCCGACCTGCCA 3555
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 Oy 3556 CAGGACACATAGAGATCTCACAGAGTGTGGCTGACCTCTCTACTGTATGCTGTAGAAAT 3615
 Db 361 CACATCTCTGCTGGGAGGCTGTACCTGTAGTACCTCTCTCTCTCTCTCTCTCTCTCTCTCT 420
 Oy 3616 CACATCTCTGCTGGGAGGCTGTACCTGTAGTACCTCTCTCTCTCTCTCTCTCTCTCTCTCT 3675
 Db 421 GGGACAGGACACACAGAGAGACAGATCTCTGTGGGACGACAGAGAGGACAGAGAGAA 480
 Oy 3676 GGGACAGGACACACAGAGAGACAGATCTCTGTGGGACGACAGAGAGGACAGAGAGAA 3735
 Db 481 GATCTGTAAATGAGGCTTGTTAGAGTCTCTCAAGTCTAGTCTACGCTAGGCTCTCTCA 540
 Oy 3736 GATCTGTAAATGAGGCTTGTTAGAGTCTCTCAAGTCTAGTCTACGCTAGGCTCTCTCA 3795
 Db 541 CACATCTCTCTCTCCGAGGCTGTGGGTCTTATATGAGTCTCTCTCTCTCTCTCTCTCTCTCT 600
 Oy 3796 CACATCTCTCTCTCCGAGGCTGTGGGTCTTATATGAGTCTCTCTCTCTCTCTCTCTCTCTCT 3855
 Db 601 GGGTCT 660
 Oy 3856 GGGTCT 720
 Db 661 TGAAG 690
 Oy 3916 TGAAG 3975
 Db 721 CTGCT 780
 Oy 3976 CTGCT 4035
 Db 781 AGATCT 840
 Oy 4036 AGATCT 4095
 Db 841 ACAGAGAGACACCCAGTGAAGGCTTCTCCAGGAGGCTCCGACCTCTCTCTCTCTCTCTCTCT 900
 Oy 4096 ACAGAGAGACACCCAGTGAAGGCTTCTCCAGGAGGCTCCGACCTCTCTCTCTCTCTCTCTCT 4155
 Db 901 TATCTCTGGAGTCT 960
 Oy 4156 TATCTCTGGAGTCT 4215
 Db 961 TATCT 1020
 Oy 4216 TATCT 4275
 Db 1021 CATCAAAATATACAGCATCTTCT 1080
 Oy 4276 CATCAAAATATACAGCATCTTCT 4335
 Db 1081 CTGTGCTCTTGGCATATGAGTGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1140
 Oy 4336 CTGTGCTCTTGGCATATGAGTGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4395
 Db 1141 CATCTGCTCTAGTCT 1200
 Oy 4396 CATCTGCTCTAGTCT 4455
 Db 1201 AGGCTCTCTGATATCT 1260
 Oy 4456 AGGCTCTCTGATATCT 4515
 Db 1261 GGAAATCTCTGGAGAGCTGT 1320
 Oy 4516 GGAAATCTCTGGAGAGCTGT 4575
 Db 1321 TGGGAGAGAGAGAGCT 1380

Oy 4576 TGGGAG 4635
 Db 1381 CAGGTGTGGGAG 1440
 Oy 4636 CAGGTGTGGGAG 4695
 Db 1441 GAAATCAGGT 1500
 Oy 4696 GAAATCAGGT 4755
 Db 1501 TTCTCTCCATCT 1560
 Oy 4756 TTCTCTCCATCT 4815
 Db 1561 TTCTCTCCATCT 1620
 Oy 4816 TTCTCTCCATCT 4875
 Db 1621 GGAGTCT 1680
 Oy 4875 GGAGTCT 4935
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 Oy 4936 GGAGTCT 4995
 Db 1741 TTTGAAATCT 1800
 Oy 4996 TTTGAAATCT 5055
 Db 1801 TATGATGAGGAGAGTACACACAGAGTCTGTGTATATATGTTTAAAGGTATAGAGTCTGTGT 1860
 Oy 5056 TATGATGAGGAGAGTACACACAGAGTCTGTGTATATATGTTTAAAGGTATAGAGTCTGTGT 5115
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 Oy 5116 TATGATGAGGAGAGTACACACAGAGTCTGTGTATATATGTTTAAAGGTATAGAGTCTGTGT 5175
 Db 1921 ATGATCT 1980
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 Db 1981 AGGATCT 5235
 Oy 5236 AGGATCT 5295
 Db 2041 TGTCTACT 2100
 Oy 5296 TGTCTACT 5355
 Db 2101 ATGATCT 5415
 Oy 5356 ATGATCT 5475
 Db 2161 GCGCTGGGT 2220
 Oy 5476 GCGCTGGGT 5535
 Db 2221 TATGATCT 2280
 Oy 5536 TATGATCT 2340
 Db 2281 GAAATCTGAG 2400
 Oy 5596 GAAATCTGAG 2460
 Db 2401 CTGTAGCTCTGGGAGCTATTTTGGGAGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 2460
 Oy 5596 CTGTAGCTCTGGGAGCTATTTTGGGAGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 5655
 Db 2401 ATGATCTCTGGGTGTATCC 2419
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Db 4126 TCTGCTCTGTGTGAGAGGCGCTGG 4147
 Qy 5401 TCTGCTTTTGGAGGCGCTGG 5422

RESULT 7
 US-07-807-043B-9 STANDARD; DNA; UNC; 4157 BP.

Ac xxxxxx
 Db 91-JAN-1990 Application US/07807043B
 Db Sequence 9, Application US/07807043B
 Db Patent No. 532774
 Db GENBANK accession: U07807043B
 CC APPLICANT: Becton, Dickinson and Company
 CC TITLE OF INVENTION: Tumor Rejection Antigen Precursors, Tumor
 CC TITLE OF INVENTION: Rejection Antigens and Uses Thereof
 CC INVENTOR: Becton, Dickinson and Company
 CC CORRESPONDENCE ADDRESS:
 CC ADDRESS: Pfeife & Lynch
 CC STREET: 805 Third Avenue
 CC CITY: New York
 CC STATE: New York
 CC ZIP: 10022
 CC COMMERCIAL FORM:
 CC MEDIA TYPE: Diskette, 5.25 inch, 360 kb storage
 CC COMPUTER: IBM
 CC OPERATING SYSTEM: PC-DOS
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/07/807 043B
 CC FILING DATE: 19931212
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 07/764,364
 CC FILING DATE: 23-SEPTEMBER-1991
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 07/728,838
 CC FILING DATE: 9-JULY-1991
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 07/705,702
 CC FILING DATE: 23-May-1991
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Becton, Dickinson and Company
 CC REGISTRATION NUMBER: 30,946
 CC REFERENCE/DOCKET NUMBER: LUD 251.3
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (212) 838-3880
 CC TELEFAX: (212) 838-3884
 CC INFORMATION FOR SEQ ID NO: 9:
 CC SEQUENCE CHARACTERISTICS:
 CC LENGTH: 4157 bp
 CC TYPE: NUCLEIC ACID
 CC STRANDEDNESS: singular
 CC TOPOLOGY: linear
 CC MOLECULAR TYPE: genomic DNA
 CC FRATURE:
 CC NAME/FEATURE: MAGS-2 gene
 CC Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T; 0 other:
 Query Watch 26.1%; Score 1483; DB 4; Length 4157;
 Best Local Similarity 76.7%; Pred. No. 0.00e+00;
 Matches 2615; Conservative 0; Mismatches 622;
 Db 858 CAGGGGTTGTGGGCGACGCTCCGAGAGTCAAGGAGAGAGGAGGAGGAGTGAAG 917
 Qy 2154 CATCGGGGTGGACACAGGCTGTCAGAGGCTTCAGGAGAGAGAGAGAGAGAGAGTCAAG 2213
 Db 918 GGACCTTGGAGTCGAGTCAAGTGAAGTGCACCTTGGGTC-TGGGGATCTGGGCGACAGTGGCC 976
 Qy 2214 GGACCTTGGAGTCAAGTGAAGTGAAGTGCACCTTGGGTC-TGGGGATCTGGGCGACAGTGGCC 2273
 Db 917 GAATGTGGTGGTCAATGCTGATTCAGTCAAGCTTCAGGAGTGAAGAGAGTGGAGGCTGTGGTCTGA 1036
 Qy 2274 GAATGTGGTGGTCAATGCTGATTCAGTCAAGCTTCAGGAGTGAAGAGAGTGGAGGCTGTGGTCTGA 1036

Qy 2274 ACATATGAGGCCCATATTTCTGCATCTTTGAGGTGACAG-GACA-GAG-CTGTGTGTCTGA 2329
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 Qy 2330 GAAGTGGGGCGTCCAGGCTTCCAGAGTCCAGAGAGAGAGTCCATATGAGTGTGAGTGTGAGTGTG 2389
 Db 1097 CCCCTCTCATGAGAGTCCGACATACCCGCGCCGCGCCAGAGAAGAGAGGATGCACAGAGCTTG 1156
 Qy 2390 CCCCTCTCATGAGAGTCCGACATACCCGCGCCGCGCCGCGCCAGAGAAGAGAGTGCACACACCTG 2449
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 Db 1217 CATTTGTACACAGAGAGTGGGAGACCTCCAGGAGATAGTGTGTGTGTAAAG 1276
 Qy 2510 CATTTGTACACAGAGAGTGGGAGACCTCCAGGAGATAGTGTGTGTGTAAAG 2569
 Db 1277 AGAGAGTCTGCTCATTTCAAGGGGGTTCCTCTTGAAGAGGAGGATCCCTGGCAGAG 1336
 Qy 2570 CATTTGTACACAGAGAGTGGGAGACCTCCAGGAGATAGTGTGTGTGTAAAG 2629
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 Qy 2743 TGGGAGGATGTAGCTTGTTTTGAAGAGTGAAGTAC-TACACACAGGAGGCC-TC 2802
 Db 1514 TGGTGGACATATGATGATGTGTAGAGAGTCCACAGATCATGAGTGTGAGAGCTGAGATGA 1573
 Qy 2803 TGGTGTAAAGACAGAGGCTCCAGAGATCTTCCATGCTTCGGTGAAGAACATCAGGGA 2862
 Db 1574 GATGTAGAGTATCCCTGTGGGACAGAGAGAGAGGAGGAGGAGGAGAGAGAGAGAGAGAGTGG 1633
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 Db 1693 GAGATCTTGTATTCAGGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1752
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 Db 1753 GAGATCTTGTATTCAGGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1812
 Qy 3042 AAGAGAGAGGCTCCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3101
 Db 1813 AGGACACTGTGACTGATCAGTATTT-GACATCTCTGTGTCTCTCCGAGGAGCTGTGT 1871
 Qy 3102 AGGACACTGTGACTGATCAGTATTTGATATCTTCTGCTGCTCCCTCCCAAGGAGCTAG 3161
 Db 1872 AGGACACTGTGACTGATCAGTATTTGATATCTTCTGCTGCTCCCTCCCAAGGAGCTAG 1931
 Qy 3162 CAGTGTGGGCGAGTGTGTGTGCTCTCTATCTCTATCTCTATCATGATGTGAGC 3220
 Db 1932 TGTGATCATGATGATTTGTGTGCTCTCTATCTCTATCTCTATCATGATGTGAGC 3280
 Qy 3221 TGTGATCATGATGATTTGTGTGCTCTCTATCTCTATCTCTATCATGATGTGAGC 3278
 Db 1991 AAGTGTGGGCTGGTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2050
 Qy 3279 ATATAGAGGCTGGTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3338
 Db 2051 GGGAGTGTGGCAATCTCTGAGTCTTGGGAATCTGTGGGATCTGTGCTGTGCTGATGTGCA 2110
 Qy 3339 GAGATGTGGCAATCTCTGAGTCTTGGGAATCTGTGGGATCTGTGCTGTGCTGATGTGCA 3398

Db 1159 GGTATGATGAGATGCTGCGAGAGAGGCTGATATGCTCTGGCGGACATATGCA 1258
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 Db 1259 TGGAGAGGAGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1318
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 Db 1319 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1378
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 Qy 4479 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1758
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 Qy 4730 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1789
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 Qy 4749 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1849
 Db 1619 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1678
 Qy 4850 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1907
 Db 1679 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1738
 Qy 4908 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1963
 Db 1739 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1797
 Qy 4964 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5023
 Db 1798 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1857
 Qy 5024 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5083
 Db 1858 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1917
 Qy 5084 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5143
 Db 1918 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 1971
 Qy 5144 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5203
 Db 1972 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 2025
 Qy 5204 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5263
 Db 2026 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 2084
 Qy 5264 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5323
 Db 2085 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 2142
 Qy 5324 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5383
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 Qy 5384 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5443
 Db 2203 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 2261
 Qy 5444 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5502
 Db 2262 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 2317

Qy 5503 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5562
 Db 2318 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 2376
 Qy 5563 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5622
 Db 2377 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 2428
 Qy 5623 TGGAGAGGAGAGGCTGCTGCGAGAGAGGCTGCTGATATGCTCTGGCGGACATATGCA 5674

RESULT 9
 ID US-08-295-849B-14 STANDARD; DNA; UNC. 2531 BP.
 AC xxxxxx
 DT 01-JAN-1900 Application US/0829849B
 DT 02-JAN-1900 Application US/0829849B
 CC Sequence 14, Application US/0829849B
 CC Patent No. 5612201
 CC GENERAL INFORMATION
 CC APPLICANT: Leth, Bernard; Skikora, Jean-Pierre; De Smet, Charles;
 CC APPLICANT: Chomes, Patrick
 CC APPLICANT: Leth, Bernard; Skikora, Jean-Pierre; De Smet, Charles;
 CC TITLE OF INVENTION: Detecting Nucleic Acid Molecules Related In
 CC THE INVENTION: Detecting Expression Of A Tumor Antigen Precursor
 CC NUMBER OF SEQUENCES: 48
 CC COMMENTS: 48
 CC ADDRESS: Felte & Lynch
 CC STREET: 805 Third Avenue
 CC CITY: New York City
 CC STATE: New York
 CC ZIP: 10022
 CC COMPUTER READABLE FORM:
 CC MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
 CC OPERATING SYSTEM: PC-DOS
 CC SOFTWARE: Wordperfect
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/08/295 849B
 CC FILING DATE: 1-SEPTEMBER-1994
 CC CLASSIFICATION: 435
 CC PRIORITY DATA:
 CC APPLICATION NUMBER: 08/037 230
 CC FILING DATE: 26-MARCH-1993
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 07/807 043
 CC FILING DATE: 23-MAY-1992
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 07/764 364
 CC FILING DATE: 23-SEPTEMBER-1991
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 07/728 838
 CC FILING DATE: 07-JULY-1991
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 07/705 702
 CC FILING DATE: 23-MAY-1991
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Ranson, No. 5612201
 CC REFERENCE NUMBER: LUD 5355
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (212) 818 5200
 CC TELEFAX: (212) 818 5200
 CC INFORMATION FOR S50 ID NO: 14:
 CC SEQUENCE CHARACTERISTICS:
 CC TYPE: nucleic acid
 CC STRAND: single
 CC TOPOLOGY: linear

Db 719 CTGGGCTGCTGAGCTCCGACCTACTGTCAGGACGAGAGGCTGTGTCTCTCTCTCTCTCTG 778
 Qy 3956 GTGTGTGTGAGCTGCTGAC-----CT-----CTCTCTCTCTCTCTG 3994
 Db 7779 GTTCACAGAGCTCTGGGAGAGTGGCTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 838
 Qy 3995 GTCTTGGGACCTCTGGGAGAGTGGCTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4054
 Db 839 GAGGAG 898
 Qy 4055 GAGGAG 4114
 Db 899 GGGTGTGAGCTCTGGCTCTTCCACTACATCACTTCTGTGTGTGTGTGTGTGTGTGTGT 958
 Qy 4115 GGTTCACAGAGCTGTGAG 4174
 Db 959 GGGGAGAGCTACTATGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1018
 Qy 4175 GGGGAGAGCTACTATGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4234
 Db 1019 GGGGAGAGCTACTATGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1078
 Qy 4235 GGGGAGAGCTACTATGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4294
 Db 1079 GTTGTCTGT 1138
 Qy 4295 GTTGTCTGT 4354
 Db 1139 GTTGTCTGT 1198
 Qy 4355 GTTGTCTGT 4414
 Db 1199 GTTGTCTGT 1254
 Qy 4415 GTTGTCTGT 4474
 Db 1255 GTTGTCTGT 4534
 Qy 4475 GTTGTCTGT 4594
 Db 1315 GTTGTCTGT 1374
 Qy 4595 GTTGTCTGT 4654
 Db 1375 GTTGTCTGT 1434
 Qy 4655 GTTGTCTGT 4714
 Db 1435 GTTGTCTGT 4774
 Qy 4715 GTTGTCTGT 4774
 Db 1475 GTTGTCTGT 1534
 Qy 4775 GTTGTCTGT 1594
 Db 1535 GTTGTCTGT 1654
 Qy 4775 GTTGTCTGT 1714
 Db 1655 GTTGTCTGT 1774
 Qy 4775 GTTGTCTGT 1834
 Db 1775 GTTGTCTGT 1894
 Qy 4775 GTTGTCTGT 1954

Qy 5012 GTTGTCTGT 5071
 Db 1844 GTTGTCTGT 1903
 Qy 5072 GTTGTCTGT 5129
 Db 1904 GTTGTCTGT 1961
 Qy 5130 GTTGTCTGT 1989
 Db 1962 T AGAATGCTGGA-TGGC-AGTAAATCTATGATATGATATGATATGATATGATATGAT 2018
 Qy 5190 TGAATGAGAGCTGAAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2249
 Db 2019 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATATAT 2077
 Qy 5250 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 5307
 Db 2078 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATATAT 2137
 Qy 5308 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 5367
 Db 2138 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 2197
 Qy 5368 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 5427
 Db 2198 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 2257
 Qy 5428 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 5487
 Db 2258 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 5534
 Qy 5488 TCTCTCTTTCAG-TAGCTATATCTGTAATATATATATATATATATATATATATATAT 5534

RESULT 11
 ID US-08-299-8498-16 STANDARD; DNA: UNC; 2226 BP.
 DE 01-JAN-1900
 DE Sequence 16, Application US/082998498.
 DE Sequence 16, Application US/082998498.
 DE GENERAL INFORMATION:
 CC APPLICANT: De Plan, Etienne; Boon-felleur, Thierry;
 CC APPLICANT: Leth, Bernard; Siskora, Jean-Pierre; De Smet, Charles;
 CC TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
 CC TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precursor
 CC
 CC NUMBER OF SEQUENCES: 48
 CC CORRESPONDENCE ADDRESS:
 CC ADDRESS: Felfe & Lynch
 CC STREET: Bushville Avenue
 CC CITY: New York
 CC STATE: New York
 CC ZIP: 10022
 CC COMMUNICATIONS: DISKETTE, 5.25 inch, 360 Kb storage
 CC MEDIA TYPE: DISKETTE, 5.25 inch, 360 Kb storage
 CC COMPUTER: IBM
 CC OPERATING SYSTEM: PC-DOS
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/08/299,8498
 CC FILING DATE: 1-SEPTEMBER-1994
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 08/037,230
 CC FILING DATE: 26-MARCH-1993
 CC PREVIOUS APPLICATION NUMBER: PCT/US92/04354
 CC FILING DATE: 22-MAY-1992
 CC PRIOR APPLICATION DATA:

W1994H

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MPSch_nnn n.a. - n.a. database search, using Smith-Waterman algorithm
Run on: Tue Apr 7 22:19:51 1998; MasPar time 49.50 seconds
Tabular output not generated. 841,068 Million cell updates/sec
Title: US-08-190-411A-1
Definition: (1914761) from 5941104.seq
Perfect Score: 831
N.A. Sequence: 3931 GCCGCACNAGAGCCGCTCGCAGAGTCGTCCTTCCTC 4761
Comp: CCGGGTGTGCTGGCGACCCGTTCACGACGAAAGAG
Scoring table:
Gap 6
Nmatch STD : Dbase 0: Query 0
Searched: 96462 seqs, 25105745 bases x 2
Post-processing: Minimum Match 08
Listing first 45 summaries
Database: n-issued
10:back1 2151 31:52 4:53 5:54 6:55 7:56 8:57 9:CT930
10:CT91 11:CT92 12:CT93 13:CT94 14:CT95 15:CT96
Statistics: Mean 8.492; Variance 4.464; scale 1.902

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description	Pred. No.
1	831	100	0	2419	Sequence 7, Applicatio	0.00e+00
2	831	100	0	4	US-07-807- Sequence 7, Applicatio	0.00e+00
3	831	100	0	5674	US-07-807- Sequence 8, Applicatio	0.00e+00
4	831	100	0	5674	US-08-190- Sequence 1, Applicatio	0.00e+00
5	831	100	0	5674	US-08-190- Sequence 2, Applicatio	0.00e+00
6	584	70.3	2531	7	US-08-299- Sequence 14, Applicatio	0.00e+00
7	584	70.3	2531	7	US-08-299- Sequence 13, Applicatio	0.00e+00
8	513	61.7	2205	7	US-08-299- Sequence 17, Applicatio	0.00e+00
9	513	61.7	2205	7	US-08-299- Sequence 11, Applicatio	0.00e+00
10	502	60.4	1640	7	US-08-299- Sequence 11, Applicatio	0.00e+00
11	480	60.2	2226	7	US-08-299- Sequence 16, Applicatio	0.00e+00
12	488	58.7	4157	7	US-08-299- Sequence 9, Applicatio	0.00e+00
13	488	58.7	4157	7	US-08-299- Sequence 9, Applicatio	0.00e+00
14	464	55.8	1810	7	US-08-299- Sequence 20, Applicatio	0.00e+00
15	452	54.4	1068	7	US-08-299- Sequence 15, Applicatio	0.00e+00
16	451	54.3	1068	7	US-08-299- Sequence 13, Applicatio	0.00e+00
17	385	46.3	1947	7	US-08-299- Sequence 13, Applicatio	0.00e+00
18	385	46.3	1412	7	US-08-299- Sequence 21, Applicatio	2.24e-282
19	342	41.2	1107	7	US-08-299- Sequence 23, Applicatio	1.24e-247

20	186	72.1	1866	6	US-08-403- Sequence 1, Applicatio	1.56e-171
21	149	17.9	225	7	US-08-299- Sequence 18, Applicatio	1.21e-93
22	149	17.9	225	7	US-08-299- Sequence 18, Applicatio	1.21e-93
23	141	17.0	943	4	US-07-807- Sequence 12, Applicatio	2.13e-87
24	136	16.0	2160	7	US-08-299- Sequence 12, Applicatio	1.62e-88
25	135	16.2	2099	7	US-08-299- Sequence 25, Applicatio	1.00e-82
26	135	16.2	2099	7	US-08-299- Sequence 22, Applicatio	2.67e-57
27	102	12.3	920	7	US-08-299- Sequence 16, Applicatio	5.98e-46
28	87	10.5	687	6	US-08-403- Sequence 1, Applicatio	1.65e-27
29	87	10.5	687	6	US-08-403- Sequence 1, Applicatio	1.65e-27
30	62	7.5	461	6	US-08-403- Sequence 14, Applicatio	1.28e-24
31	58	7.0	7218	7	US-08-299- Sequence 14, Applicatio	1.61e-11
32	58	7.0	7218	7	US-08-299- Sequence 14, Applicatio	1.61e-11
33	39	4.7	215	6	US-08-238- Sequence 5, Applicatio	1.47e-09
34	36	4.3	215	6	US-08-238- Sequence 5, Applicatio	1.47e-09
35	29	3.5	215	6	US-08-238- Sequence 5, Applicatio	3.60e-05
36	29	3.5	215	6	US-08-238- Sequence 5, Applicatio	3.60e-05
37	27	3.2	27	7	US-08-443- Sequence 1, Applicatio	5.62e-04
38	27	3.2	27	7	US-08-443- Sequence 1, Applicatio	5.62e-04
39	25	3.0	72	14	US-07-807- Sequence 10, Applicatio	2.93e-03
40	25	3.0	72	14	US-07-807- Sequence 10, Applicatio	2.93e-03
41	24	2.9	82	14	US-07-807- Sequence 87, Applicatio	2.98e-02
42	23	2.8	74	14	US-07-807- Sequence 84, Applicatio	1.07e-01
43	23	2.8	74	14	US-07-807- Sequence 84, Applicatio	1.07e-01
44	23	2.8	74	14	US-07-807- Sequence 84, Applicatio	1.07e-01
45	23	2.8	81	14	US-07-807- Sequence 88, Applicatio	1.07e-01

ALIGNMENTS

RESULT 1
AC XXXXX
DF 01-JAN-1900
DE Sequence 7, Application US/08299849B
CC Sequence 7, Application US/08299849B
CC Patent No. 5612201
CC GENERAL INFORMATION:
CC APPLICANT: De Plessen, Etienne, Boon-Talieu, Thierry;
CC INVENTOR: De Plessen, Etienne, Boon-Talieu, Thierry;
CC APPLICANT: Chomez, Patrick
CC TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
CC TITLE OF INVENTION: Determining Expression of a Tumor Antigen Precursor
CC NUMBER OF SEQUENCES: 48
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Pharmacia Biotech, Inc.
CC STREET: 405 Third Avenue
CC CITY: New York City
CC STATE: New York
CC COUNTRY: USA
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
CC COMPUTER: IBM
CC SOFTWARE: PC-DOS
CC SOFTWARE: SequenSoft
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/299,849B
CC PUBLICATION NUMBER: 5,612,201
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: 08/037,230
CC FILING DATE: 22-May-1992
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: PCT/US92/04354
CC FILING DATE: 22-May-1992
CC PUBLICATION NUMBER: 07/807,043
CC FILING DATE: 12-DECEMBER-1991
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: 07/164,364
CC FILING DATE: 23-SEPTEMBER-1991
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: 07/164,364
CC FILING DATE: 23-SEPTEMBER-1991

RESULTS

ID US-08-399-8 STANDARD; DNA; UNC: 5674 BP.

D 01-JAN-1900
DE Sequence 8, Application US/08299849B.
CC Sequence 8, Application US/08299849B.
GENERAL INFORMATION:
CC APPLICANT: De Plessis, Etienne; Boon-Falloux, Thierry;
CC APPLICANT: Lech, Bernard; Szikora, Jean-Pierre; Du Smet, Charles;
CC TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
CC TITLE OF INVENTOR: Determining Expression Of A Tumor Antigen Precursor
CC NUMBER OF SEQUENCES: 48
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: JMS Felte & Lynch
CC CITY: New York City
CC STATE: New York
CC COUNTRY: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM PC-DOS
SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299, 849B
PRIORITY DATE: SEPTEMBER-1994
CLASSIFICATION: G45
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
PRIORITY DATE: MAY-1992
FILING DATE: OCTOBER-1991
APPLICATION NUMBER: 07/807,043
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/654,164
FILING DATE: 23-SEPTEMBER-1991
APPLICATION NUMBER: 07/628,838
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9-JULY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5612201man D.
REGISTRATION NUMBER: 30,946
TELECOMMUNICATION INFORMATION: 5355
TELEPHONE: (212) 688-3200
FAX: (212) 838-3884
INFORMATION CHARACTERISTICS:
LENGTH: 5674 base pairs
TYPE: nucleic acid
SYNTHESIS METHOD: single strand
TOPOLAGT: linear
MOLECULE TYPE: genomic DNA
NAME/KEY: MKE-1 gene
Sequence 5074 BP: 1276 AT; 1644 GC; 1569 GT; 1185 TA; 0 other;
Score Match 100.0%; Score Gap 1.; BB 7.; Length 5674;
Best Local Similarity 100.0%; Seed 0.0m+00;
Matches 831.; Conservative 0.; Indels 0.; Gaps 0;

D 3931 GGCGCACAACGACTGGGCCTGGGTGTGTGGTCAGATGTCGCCAATCTCTCTCTCTCC 3990

.....

Db 876 AGACATATGTTGGGATCCACAGAGAGCTGTCACCAACATTTGTCAGGAACA 935
 Qy 4354 GCACAGCTCTATGGGAGCGCCAGAGAGCTCTACCAAGATTTGTCAGGAAGA 4623
 Db 935 GCGGATGATCGGAGGTCGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 995
 Qy 4524 CTTGGAGTAGT-GGCAGGCTCGCGAGACAGATGATCCGACAGCTATGAGTCTCTGGGGTCC 4682
 Db 996 AAGGCGCGCTGTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1055
 Qy 4683 AAGGCGCGCTGTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4742
 Db 1055 AAGGCGCGCTGTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1072
 Qy 4743 AAGAGTTCGCTTTTCT 4759
 RESULT 11
 ID US-08-299-849B-16 STANDARD; DNA; UNC; 2226 BP.
 DE OX190-1900
 DE Sequence 16, Application US/08299849B.
 DE Sequence 16, Application US/08299849B.
 DE Sequence 16, Application US/08299849B.
 DE GENERAL INFORMATION:
 CC APPLICANT: De Plaan, Etienne; Boon-Fallieur, Thierry;
 CC APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
 CC TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful in
 CC TITLE OF INVENTION: Determining Expression of A Tumor Antigen Precursor
 CC
 CC NUMBER OF SEQUENCES: 48
 CC CORRESPONDENCE ADDRESS:
 CC ADDRESSEE: Dr. Etienne Boon-Fallieur
 CC CITY: 8000 Leuven, Belgium
 CC STATE: Leuven, Belgium
 CC ZIP: 10002
 CC COUNTRY: Belgium
 CC MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
 CC COMPUTER: IBM
 CC OPERATING SYSTEM: PC-DOS
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/08/299, 849B
 CC FILING DATE: 1-SEPTEMBER-1994
 CC PRIORITY DATA:
 CC PRIOR APPLICATION NUMBER: 08/037,230
 CC FILING DATE: 08-MARCH-1993
 CC APPLICATION NUMBER: PCT/US93/04354
 CC FILING DATE: 22-MAY-1992
 CC PRIOR APPLICATION DATA:
 CC PRIOR APPLICATION NUMBER: 07/807,043
 CC FILING DATE: 12-SEPTEMBER-1991
 CC PRIOR APPLICATION DATA:
 CC PRIOR APPLICATION NUMBER: 07/728,838
 CC FILING DATE: 23-MAY-1991
 CC APPLICATION NUMBER: 9-JULY-1991
 CC FILING DATE: 07/705,702
 CC APPLICATION NUMBER:
 CC NAME: Hanson, No. 5612201 Jean D.
 CC REFERENCE/DOCKET NUMBER: 30,946
 CC TELEPHONE: (212) 688-9200
 CC TELEPHONE: (212) 838-3884
 CC INFORMATION FOR SEQ ID NO: 16:

CC SEQUENCE CHARACTERISTICS:
 CC LENGTH: 2226 bp
 CC TYPE: nucleic acid
 CC STRANDEDNESS: single
 CC MOLECULE TYPE: genomic DNA
 CC NAME/KEY: MAGS-3 gene
 CC Sequence 2226 bp; 539 A; 542 C; 582 G; 543 T; 0 other;
 Query Match 60.24; Score 500; DB 7; Length 2226;
 Heat Local Similarity 85.84; Pred. No. 0.00e+00;
 Matches 611; Conservative 0; Mismatches 99; Indels 2; Gaps 2;
 Db 687 CTCTCTCTGCTCCAGGACACCTGGGGAGGTGCTGCTGGTACACAGGTGCTCTCA 746
 Qy 3987 CTCTCTCTGCTCCAGGACACCTGGGGAGGTGCTGCTGGTACACAGGTGCTCTCC 4046
 Db 747 AAGTCTCTCAGGAGGCTCGCCATCCGCTCCATCCATGATCTACTCTATGAGGACAT 806
 Qy 4047 AAGTCTCTCAGGAGGCTCGCCATCCGCTCCATCCATGATCTACTCTATGAGGACAT 4106
 Db 807 CATTATGAGCTCGACGACACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 865
 Qy 4107 CATTATGAGCTCGACGACACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4166
 Db 867 TCTGTTCCGAGGATGATCATAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4226
 Qy 4167 TCTGTTCCGAGGATGATCATAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4286
 Db 927 ATATATGATCAGAGCTGCTCAAGAGGACAAATCTGTCAGAGGCTCTCAAAAT 986
 Qy 4227 ATATATGATCAGAGGACGATCAAGAGGACAAATCTGTCAGAGGCTCTCAAAAT 4286
 Db 987 AATAGCGCGCTCTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1046
 Qy 4287 AATAGCGCTCTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4346
 Db 1047 GAGTATGATCAG 1106
 Qy 4347 GAGTATGATCAG 4406
 Db 1107 GAGTATGATCAG 1166
 Qy 4407 GTCCTCTCTATGAGGCTCTGGGTATATCAGATCATGATCCATCCAGAGAGGCTCTG 4465
 Db 1167 ATATATGATCAG 1226
 Qy 4466 ATATATGATCAG 4525
 Db 1227 GAGTATGATCAG 1286
 Qy 4526 GAGTATGATCAG 4585
 Db 1287 AAGAGAGCTCTCAGGAG 1346
 Qy 4586 AAGAGAGCTCTCAGGAG 4644
 Db 1347 AAGAGAGCTCTCAGGAG 1398
 Qy 4645 AAGAGAGCTCTCAGGAG 4696
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 ID US-08-299-849B-9 STANDARD; DNA; UNC; 4157 BP.
 DE OX190-1900
 DE Sequence 9, Application US/08299849B.
 DE Sequence 9, Application US/08299849B.
 DE Sequence 9, Application US/08299849B.
 DE GENERAL INFORMATION:
 CC APPLICANT: De Plaan, Etienne; Boon-Fallieur, Thierry;
 CC APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;


```

QY 4258 ABAATGCTGGAGTGTATCATAAATATACAGACACTGTTTCTGTGATCTTCGGCA 4317
DB 181 AGCTTCGAGTCCCTGAGATGATCTTGGCATGAGTGAAGAGTGGACCCCGCAG 240
QY 4318 AAGCTCTGAGTCTCTGAGTGGCTTATGGCATGAGTGAAGAGTGGACCCCGCAG 4377
DB 241 CAACACTACACCTCTGACCTGCTGGGCTTCTCTATGATGCTCTGGGTAATA 300
QY 4378 CAGCTCTGAGTCTCTGAGTGGCTTCTCTATGATGCTCTGGGTAATA 4437
DB 301 TCGATCTTCCAGACAGAGGCTCTGATATGCTCTGGGCAATTCGATGAGAG 360
QY 4438 TCGATCTTCCAGACAGAGGCTCTGATATGCTCTGGGCAATTCGATGAGAG 4497
DB 361 CGACAGCCCTCTGAGAGGAATCTGGGAGAGCTGGTGTATGCTGGGCTGATGAG 420
QY 4498 TCGATCTTCCAGACAGAGGCTCTGATATGCTCTGGGCAATTCGATGAGAG 4557
DB 421 GAGGAGGACACTGCTATGGGAGCCAGGAACTGCTCACCAAGATTGGTGAGGA 480
QY 4558 GAGGAGGACACTGCTATGGGAGCCAGGAACTGCTCACCAAGATTGGTGAGGA 4617
DB 481 AACTCTGAGTGTGAGGAGAGTACCGGAGCATATCTGGGCTCTGAGTGTGAGG 540
QY 4618 AAGTACTGAGTAC - GGCAGTGGCGAGCATGATCCGACCTATGATGCTCTG 4676
DB 541 GAGTCTGAGGAGTCTGCTGAGCATGAGTGTGAGTGTGAGTGTGAGTGTGAG 600
QY 4677 GAGTCTGAGGAGTCTGCTGAGCATGAGTGTGAGTGTGAGTGTGAGTGTGAG 619
DB 601 GAGTCTGAGGAGTCTGCTGAGCATGAGTGTGAGTGTGAGTGTGAGTGTGAG 6736
QY 4737 GAGTCTGAGGAGTCTGCTGAGCATGAGTGTGAGTGTGAGTGTGAGTGTGAG 4755

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Search completed: Tue Apr 7 22:20:44 1998
 Job time : 53 secs.

WORLD

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MSEARCH n.a. n.a. database search, using Smith-Waterman algorithm

Run on: Tue Apr 7 21:57:15 1998; MaxExp time 152.21 Seconds
Tabular output not generated. 1366.269 Million char updates/sec

Title: US-08-190-411A-1
Description: (57-219) from 5441104.seq
Perfect Score: 163
N.A. Sequence: 57 ACCGATCAAGAGCTCTTAC
Comp: TCGCTGTGAGGGCGGCTTG 219

Scoring table: TABLE default
Gap 6

Nmatch STD : Dbase 0; Query 0

Searched: 354530 seqs, 591221332 bases x 2

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: emb153
1:em.in 2:em.ov 3:em.ov 4:em.ov 5:em.pl 6:em.jtg
7:em.hum1 8:em.hum2 9:em.ba 10:em.ro 11:em.un 12:em.vi

Database: gendb1
14:gd.ro 15:gd.om 16:gd.ov 17:gd.in 18:gd.ph 19:gd.ba
20:gd.st 21:gd.vy 22:gd.ph 23:gd.sy 24:gd.un 25:gd.pat
26:gd.jtg

Statistics: Mean 8.931; Variance 4.495; scale 1.987

Pred. No. is the number of entities predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	DB ID	Description	Pred. No.
1	163	100.0	5674	25 124013	Sequence 1 from patent 1.03e-107
2	163	100.0	5674	25 136923	Sequence 8 from patent 1.03e-107
3	71	43.6	4157	25 136924	Sequence 9 from patent 2.47e-34
4	32	19.6	215	25 128278	Sequence 5 from patent 2.13e-06
5	32	19.6	215	25 128278	Sequence 5 from patent 2.13e-06
6	28	17.2	215	25 128278	Sequence 5 from patent 6.77e-04
7	24	14.7	565	25 104076	gnaa encoding envelope 1.59e-01
8	24	14.7	565	25 104076	gnaa encoding envelope 1.59e-01
9	22	13.5	448	25 159555	Sequence 7 from patent 2.01e-00
10	21	12.9	531	14 At-013283	Mus musculus T-box fam 6.93e-00
11	21	12.9	565	25 104076	gnaa encoding envelope 6.93e-00
12	21	12.9	565	25 104076	gnaa encoding envelope 6.93e-00
13	21	12.9	1442	25 108570	Sequence 13 from Paten 6.93e-00
14	21	12.9	1442	25 108570	Dog pulmonary surfacta 6.93e-00

15	21	12.9	1442	25 108511	Sequence 3 from Patent 6.93e-00
16	21	12.9	1442	25 108511	Sequence 3 from Patent 6.93e-00
17	21	12.9	2364	19 STMSPP	Streptomyces griseus s 6.93e-00
18	21	12.9	2364	19 STMSPP	Streptomyces griseus s 6.93e-00
19	21	12.9	2364	19 STMSPP	T.thermophilus arg ORF 6.93e-00
20	21	12.9	11434	19 AE001097	Archaeoglobus fulgidus 6.93e-00
21	21	12.9	13725	19 AE000832	Methanobacterium therm 6.93e-00
22	21	12.9	78064	26 HSAC000376	*** SEQUENCING IN PROG 6.93e-00
23	21	12.9	78064	26 HSAC000376	*** SEQUENCING IN PROG 6.93e-00
24	21	12.9	179017	26 HS100224	Human DNA sequence *** 6.93e-00
25	21	12.9	238000	26 HSAC000134	Human sapiens clone 137 6.93e-00
26	20	12.3	1469	25 141362	Sequence 142 from pate 2.30e-01
27	20	12.3	1469	25 141362	Sequence 142 from pate 2.30e-01
28	20	12.3	2393	15 OATNFGI11	Ovis aries insulin gen 2.30e-01
29	20	12.3	3946	16 GGMIAK	G.gallus Mia-CK gene. 2.30e-01
30	20	12.3	7218	25 164494	Sequence 14 from Paten 2.30e-01
31	20	12.3	7218	25 164494	Sequence 14 from Paten 2.30e-01
32	20	12.3	110000	26 AC001656	*** SEQUENCING IN PROG 2.30e-01
33	19	11.7	3137	25 187839	Sequence 3 from patent 7.35e-01
34	19	11.7	3137	25 187839	Sequence 3 from patent 7.35e-01
35	19	11.7	3658	14 NF03045	Neurospora maxima gen 7.35e-01
36	19	11.7	5275	16 GGAIEX1	G.gallus axonin-1 gene 7.35e-01
37	19	11.7	3248	17 CER1011	C.eurohabditis elegans 7.35e-01
38	19	11.7	3248	17 CER1011	C.eurohabditis elegans 7.35e-01
39	19	11.7	4715	26 HSUJAC	Human DNA sequence *** 7.35e-01
40	19	11.7	103280	26 HS234H5	Human DNA sequence *** 7.35e-01
41	19	11.7	115060	26 HS73H16	Human DNA sequence *** 7.35e-01
42	19	11.7	140536	26 HS74E81	Human DNA sequence *** 7.35e-01
43	19	11.7	140536	26 HS74E81	Human DNA sequence *** 7.35e-01
44	19	11.7	149436	26 HS22213	Human DNA sequence *** 7.35e-01
45	19	11.7	223457	26 AC003658	Human sapiens: HTGS pha 7.35e-01

ALIGNMENTS

RESULT	LOCUS	SEQUENCE	5674 bp	DNA	PAT	14-AUG-1996
1	124013	Sequence 1 from patent US 5541104.				
DEFINITION	Sequence 1 from patent US 5541104.					
ACCESSION	124013					
KEYWORDS	3169383					
ORGANISM	Unknown.					
REFERENCE	1 (bases 1 to 5674)					
AUTHORS	Chen,Y., Stockert,E., Chen,Y., Garin-Chesa,P., Rettig,W.J., van der					
TITLE	Suggested nucleotide sequence of the human LTR and LTR-adjacent					
FEATURES	precursor: mage-1					
BASE COUNT	1278 a 1644 c 1569 g 1185 t					
ORIGIN	100.0%: Score 163; DB 25; Length 5674;					
Best Local Similarity	100.0%; Pred. No. 1.03e-107;					
Matches	163; Conservative 0; Mismatches 0; Gaps 0;					
Db	57 ACCGATCAAGCATCTTCAGCTTCACCCGACGAGCAGGAGCATCGGTCCACC 116					
Qy	57 ACCGATCAAGCATCTTCAGCTTCACCCGACGAGCAGGAGCATCGGTCCACC 116					
Db	117 CTGCTGTCTCAACCCAGGAGCCGATGCGCCGACGATGTGAGCCATCTGACTTGGACATTA 176					
Qy	117 CTGCTGTCTCAACCCAGGAGCCGATGCGCCGACGATGTGAGCCATCTGACTTGGACATTA 176					
Db	177 GTGCTGTAGGAGGAGGAGGATTTTCCTGTGAGGCGCGCTTG 219					
Qy	177 GTGCTGTAGGAGGAGGAGGATTTTCCTGTGAGGCGCGCTTG 219					

[illegible]

[illegible]

WFOH

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Msrch_n n.a. n.a. database search, using Smith-Waterman algorithm

Run on: Tue Apr 7 22:05:00 1998; Memory limit 673.40 Seconds
1459.176 Million Coll updates/sec

Tabular output not generated.

Title: >US-08-190-411A-1
Description: (3911-4761) from 541104.seq
Perfect Score: 831
N.A. Sequence: 3911 GGGCCACMAGAGCCCTGGG.....CAGATCGATCGCTTCTTC 4761
Comp: CCGGGGTGCTTCGAGCG

Scoring table: TABLE default

Nmatch STD : Dbase 0; Query 0

Searched: 354530 seqs, 391221332 bases x 2

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: emb153
1-em_in 2-em_or 3-em_on 4-em_ov 5-em_pl 6-em_htg
7-em_hum 8-em_hum2 9-em_ba 10-em_ro 11-em_un 12-em_v1
13-em_ro 14-em_ro 15-em_ro 16-em_ro 17-em_ro 18-em_pl 19-em_ba
20-em_pl 21-em_v1 22-em_ph 23-em_sy 24-em_un 25-em_pl
26-em_htg

Database: genbankdb

Statistics: Mean 10.687; Variance 5.190; scale 2.059

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB	ID	Description	Pred. No.
1	831	100.0	2419	25	136922	Sequence 7 from patent	0.00e+00
2	831	100.0	5874	25	136923	Sequence 8 from patent	0.00e+00
3	831	100.0	2314	25	136924	Sequence 14 from patent	0.00e+00
4	582	70.0	2314	25	136925	Sequence 13 from patent	0.00e+00
5	582	70.0	2311	25	136928	Sequence 14 from patent	0.00e+00
6	513	61.7	2305	25	136932	Sequence 17 from patent	0.00e+00
7	500	60.2	2222	25	136931	Sequence 16 from patent	0.00e+00
8	500	60.2	2222	25	136931	Sequence 15 from patent	0.00e+00
9	488	58.7	4157	25	136934	Sequence 9 from patent	0.00e+00
10	464	55.8	1810	25	136935	Sequence 20 from patent	0.00e+00
11	385	47.1	1947	25	136930	Sequence 19 from patent	0.00e+00
12	385	47.1	1947	25	136930	Sequence 18 from patent	0.00e+00
13	385	46.3	1412	25	136936	Sequence 21 from patent	5.56e-298
14	342	41.2	1107	25	136938	Sequence 23 from patent	1.32e-260

15	184	22.1	1866	25	132905	Sequence 1 from patent	5.95e-135
16	149	17.9	225	25	132913	Sequence 18 from patent	1.43e-95
17	141	17.0	943	25	132927	Sequence 12 from patent	6.43e-89
18	137	16.5	1609	14	MM019033	Mus musculus Snage-3 p	1.33e-85
19	136	16.5	1609	14	MM019033	Mus musculus Snage-3 p	1.33e-85
20	136	16.4	3809	14	MM019031	Mus musculus Snage-1 p	8.94e-85
21	135	16.2	2059	25	132940	Sequence 25 from patent	6.00e-84
22	135	16.2	2059	25	132940	Mus musculus Snage-2 p	6.00e-84
23	135	16.2	2428	14	MM019032	Mus musculus Snage-2 p	6.00e-84
24	102	12.3	2865	25	132946	Sequence 22 from patent	5.55e-57
25	87	10.5	687	25	132928	Sequence 4 from patent	5.20e-45
26	82	7.5	461	25	132296	Sequence 2 from patent	1.01e-25
27	71	7.1	3899	14	MUSKIN	Mouse gene for necln	1.74e-23
28	59	7.1	3899	14	MUSKIN	Mouse gene for necln	1.74e-23
29	58	7.0	7218	25	166494	Sequence 14 from patent	9.56e-23
30	33	4.7	2471	14	MM251366	Sequence 1 from patent	2.50e-09
31	33	4.7	2471	14	MM251366	Sequence 14 from patent	2.50e-09
32	39	4.7	7218	25	166494	Sequence 5 from patent	2.30e-07
33	36	4.3	215	25	132878	Sequence 5 from patent	2.30e-07
34	36	4.3	215	25	132878	Sequence 1 from patent	6.98e-02
35	29	3.5	215	25	132878	Sequence 5 from patent	6.98e-02
36	27	3.2	372	22	115293	Sequence 1 from patent	4.91e-02
37	25	3.0	312	22	115293	Sequence 1 from patent	4.91e-02
38	25	2.9	1449	14	ENKKE	Enkephalin gene for	3.05e-00
39	24	2.9	1449	14	ENKKE	Enkephalin gene for	3.05e-00
40	24	2.9	1663	15	MY92534	Muscle 1 vision microsat	3.05e-00
41	24	2.9	1628	26	USAC00380	SEQUENCING IN PROG	3.05e-00
42	23	2.8	3272	14	RAYGURA	Raynham receptor	1.01e-01
43	23	2.8	3272	14	RAYGURA	Raynham receptor	1.01e-01
44	23	2.8	3272	14	RAYGURA	Raynham receptor	1.01e-01
45	23	2.8	170309	26	AC003061	Cenorchabitis elegans	1.01e-01
46	23	2.8	170309	26	AC003061	Cenorchabitis elegans	1.01e-01

ALIGNMENTS

LOCUS	1	36922	2419	bp	DNA	PAT	21-APR-1997
DEFINITION	Sequence 7 from patent	US 5612201					
ACCESSION	U00000	136922					
KEYWORDS	UNKNOWN	42084892					
SOURCE	UNKNOWN						
ORGANISM	UNKNOWN						
REFERENCE	1 (bases 1 to 2419)						
AUTHORS	De Plam, E., Moon-Fallou, T., Lethé, B., Sikora, J., De Smet, C. and						
TITLE	Isolated tumor rejection antigen precursor						
JOURNAL	Patent: US 5612201-A 7 18-MAR-1997						
FEATURES	1..2419						
BASE COUNT	562 a 581 c 877 g 599 t						
ORIGIN							
Match	100.0%	Score	831	DB 25	Length	2419	
Local Similarity	100.0%	Pred	No. 0.00e+00	Indels	0	Gaps	0
Matches	831	Conservative	0	Matches	0		
Db	676	GGCCACMAGAGCCCTGGGCTGGTGTGTGACAGTGCACATCTCTCTCTCTCT	735				
Qy	3931	GGCCACMAGAGCCCTGGGCTGGTGTGTGACAGTGCACATCTCTCTCTCTCT	3990				
Db	736	TCTGTCTTGGGACCTTGGGACCTTGGGACCTTGGGACCTTGGGACCTTGGGAC	795				
Qy	3991	TCTGTCTTGGGACCTTGGGACCTTGGGACCTTGGGACCTTGGGACCTTGGGAC	4050				
Db	796	TCTGTGTGAGCTTCTGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT	855				
Qy	4051	TCTGTGTGAGCTTCTGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT	4110				
Db	856	TGAGGCTTCCAGACGCTCGAGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG	915				

[illegible]

Db 558 ACCGCTCACTGG--GGCTGTGTGCAAGGAGTGGCTGATGTGTGCTGCG 715
 Qy 4158 TCTTGGAGCTTGTTCGAGAGTACTACATAGAGGTGGCTGATTTGGTGTTC 4217
 Db 716 TCTGTCACATTTGTGATGATGCTGTGTGTGTGTGTGTGTGTGTGTGTGT 775
 Qy 4218 TCTCTCTCAATATCGAGCCAGGAGCGATGACAAAGCGAAGATCTGGAGATGTCA 4277
 Db 776 TCAAAATATCAAGCATTTTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 835
 Qy 4278 TCAAAATATCAAGCATTTTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4336
 Db 836 GTGATTTTGGCATGTGAGAGATGGAGCCGCG--GGCCATCTTCACTGCTGTC 894
 Qy 4397 CTGTGCTTGGCATGTGAGAGATGGAGCCGCG--GGCCATCTTCACTGCTGTC 4396
 Db 895 ACTGCTTGGCATGTGAGAGATGGAGCCGCG--GGCCATCTTCACTGCTGTC 954
 Qy 4397 ACTGCTTGGCATGTGAGAGATGGAGCCGCG--GGCCATCTTCACTGCTGTC 954
 Db 955 GGCCTCTGATATGTGTGATGATGATGATGATGATGATGATGATGATGATG 1014
 Qy 4457 GGCCTCTGATATGTGTGATGATGATGATGATGATGATGATGATGATGATG 4316
 Db 1015 GCATTTGATATGTGTGATGATGATGATGATGATGATGATGATGATGATG 1069
 Qy 4317 GATATTTGGAGAGCTGATGATGATGATGATGATGATGATGATGATGATG 4376
 Db 1070 GGCATCTGAGAGAGCTGATGATGATGATGATGATGATGATGATGATG 1129
 Qy 4377 GGCATCTGAGAGAGCTGATGATGATGATGATGATGATGATGATGATG 4336
 Db 1130 GAGTGGCCAGAGATGATGATGATGATGATGATGATGATGATGATGATG 4395
 Qy 4377 GAGTGGCCAGAGATGATGATGATGATGATGATGATGATGATGATGATG 4395
 Db 1190 GAACAGCATGTGTGAAGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1249
 Qy 4456 GAAACAGCATGTGTGAAGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4755
 Db 1250 TCTT 1253
 Qy 4756 TCTT 4759

RESULT 13 136936 1412 bp DNA PAT 21-APR-1997
 DEFINITION Sequence 21 from patent US 5612201.
 ACCESSION 136936
 KEYWORDS 92084996
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 1412)
 De Pien,E., Boon-Fallieur,T., Lethé,B., Szikora,J., De Smet,C. and
 Chueser,P. Isolated nucleic acid molecules useful in determining expression of
 a tumor rejection antigen precursor
 JOURNAL Patent: US 5612201-A 21 18-MAR-1997
 FEATURES Location/Qualifiers
 source 324 a 402 c 393 g 293 t
 BASE COUNT 324 a 402 c 393 g 293 t
 ORIGIN
 Query Watch 46.3%; Score 385; DB 25; Length 1412;
 Best Local Similarity 79.0%; Pred. No. 5.56e-298;
 Matches 592; Conservative 0; Mismatches 147; Indels 10; Gaps 6;
 Db 555 GGAGAGGTGTCTGTGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 624

Qy 4009 GGAGAGGTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4068
 Db 625 CTCTCCATTTCTGTCTACTACTACTATTATGAGCGCATATGATGAGGCTCTCAGCATCA 684
 Qy 4059 GTTTCCTACATCACTACTACTACTACTACTACTACTACTACTACTACTACTACT 4128
 Db 685 GAG 744
 Qy 4129 TGAAG 4179
 Db 745 AGCATCAAAATTAAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 804
 Qy 4180 AGTATCACTGAG 4239
 Db 805 GAG 4299
 Qy 4240 GAG 4359
 Db 865 TCTGT 924
 Qy 4300 TCTGT 4359
 Db 925 GAG 984
 Qy 4360 GAG 4419
 Db 985 TACATCTGT 1044
 Qy 4420 TGT 4479
 Db 1045 TGT 1104
 Qy 4480 TGT 4539
 Db 1105 GATGGGT 1164
 Qy 4540 GATGGGT 4599
 Db 1165 GATGGGT 1224
 Qy 4600 GATGGGT 4658
 Db 1225 GATGGGT 1284
 Qy 4659 ACCTGTATGAGTTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1343
 Db 1285 AATATATGT 4747
 Qy 4719 TGT 4747

RESULT 14 136938 1107 bp DNA PAT 21-APR-1997
 DEFINITION Sequence 23 from patent US 5612201.
 ACCESSION 136938
 KEYWORDS 92084998
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 1107)
 De Pien,E., Boon-Fallieur,T., Lethé,B., Szikora,J., De Smet,C. and
 Chueser,P. Isolated nucleic acid molecules useful in determining expression of
 a tumor rejection antigen precursor
 JOURNAL Patent: US 5612201-A 21 18-MAR-1997
 FEATURES Location/Qualifiers
 source 1..1107
 /organism="unknown"
 BASE COUNT 269 a 283 c 295 g 260 t
 ORIGIN
 Query Watch 41.3%; Score 342; DB 25; Length 1107;

CC recognise MAGE-3. The melanoma can be treated by the administration of a recombinant melanoma antigen (MAGE-3) and a human leukocyte antigen (esp. HLA-A1).

CC Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T;

Query Match

Best Local Similarity 43.6%; Score 71; DB 1; Length 4157;

Matches 108; Conservative 0; Mismatches 31; Indels 1; Gaps 1;

DB 3 CATTCCAGATATCCATCCGCGGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 62

QY 80 CACCCCGATCCATCCGCGGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 121

QY 63 ACAGC-GCCGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 121

QY 140 CAGGTGCGGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 199

DB 122 TCGCCCTGAGGAGGCGCTG 141

QY 200 TCGCTGCTGAGGAGGCGCTG 219

RESULT 5

AC 032353; standard; DNA; 4157 BP.

AT Best Local Similarity 77.1%; Pred. No. 1.23e-32;

DT 22-APR-1993 (first entry)

DT MAGE-3 gene; MAGE TRAs; melanoma antigen tumor rejection antigen;

KW tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.

OS Homo sapiens.

CS Location/Qualifiers

FT /*Tag= a

PN M0220356.A.

PP 22-MAY-1992; 004354.

PP 23-MAY-1991; 08-705702.

PR 09-JUL-1991; 08-728838.

PR 12-DEC-1991; 08-807043.

PA (LUDM-) LUDMIG INST CANCER RES.

PA Boon T, Chomes P, Van Der Bruggen P, Traversari C;

DR NPI; 92-415460/50.

FT Nucleic acid mol., encoding a human tumour rejection antigen

FT precursor useful as an immunostimulant in a vaccine for

FT treatment of melanoma; also useful in diagnosis

PS Disclosure; Page 74-75; 142pp; English.

CC The sequences given in 032353-69 represent a new family of genes

CC related to a structured antigen (MAGE-3). The use of this gene

CC as a tumour rejection antigen precursor has been demonstrated.

CC The MAGE cDNAs, when tested, did not transfer expression of antigen

CC E, but they did show substantial homology to the antigen E cDNA

CC other and are expressed in tumour cells including several types of

CC human tumor cells as well as in human tumors. MAGE expression is not

CC restricted to melanomas. MAGE refers to a family of tumor rejection

CC antigens referred to as MAGE TRAs or melanoma antigen tumor rejection

CC antigens. See also 032351.

QY Sequence 4157 BP; 953 A; 1135 C; 1184 G; 883 T;

Query Match

Best Local Similarity 43.6%; Score 71; DB 1; Length 4157;

Matches 108; Conservative 0; Mismatches 31; Indels 1; Gaps 1;

DB 3 CATTCCAGATATCCATCCGCGGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 62

QY 80 CACCCCGATCCATCCGCGGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 121

QY 63 ACAGC-GCCGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 121

QY 140 CAGGTGCGGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 199

DB 122 TCGCCCTGAGGAGGCGCTG 141

QY 200 TCGCTGCTGAGGAGGCGCTG 219

QY 140 CAGGTGCGGAGATATCGGCTGCACCTTCGCTGACCGAGGAGTC 199

DB 122 TCGCCCTGAGGAGGCGCTG 141

QY 200 TCGCTGCTGAGGAGGCGCTG 219

RESULT 6

AC 032354; standard; DNA; 662 BP.

AT Best Local Similarity 77.1%; Pred. No. 1.23e-32;

DT 22-APR-1993 (first entry)

DT MAGE-21 gene.

KW melanoma antigen; MAGE TRAs; melanoma antigen tumor rejection antigen;

OS Homo sapiens.

CS Location/Qualifiers

FT /*Tag= a

PN M0220356.A.

PP 22-MAY-1992; 004354.

PP 23-MAY-1991; 08-705702.

PR 09-JUL-1991; 08-728838.

PR 12-DEC-1991; 08-807043.

PA (LUDM-) LUDMIG INST CANCER RES.

PA Boon T, Chomes P, Van Der Bruggen P, Traversari C;

DR NPI; 92-415460/50.

FT Nucleic acid mol., encoding a human tumour rejection antigen

FT precursor useful as an immunostimulant in a vaccine for

FT treatment of melanoma; also useful in diagnosis

PS Disclosure; Page 75; 142pp; English.

CC The sequences given in 032352-69 represent a new family of genes

CC related to a structured antigen (MAGE-21). The use of this gene

CC as a tumour rejection antigen precursor has been demonstrated.

CC The MAGE cDNAs, when tested, did not transfer expression of antigen

CC E, but they did show substantial homology to the antigen E cDNA

CC other and are expressed in tumour cells including several types of

CC human tumor cells as well as in human tumors. MAGE expression is not

CC restricted to melanomas. MAGE refers to a family of tumor rejection

CC antigens referred to as MAGE TRAs or melanoma antigen tumor rejection

CC antigens. See also 032351.

QY Sequence 662 BP; 155 A; 244 C; 176 G; 87 T;

Query Match

Best Local Similarity 42.9%; Score 70; DB 1; Length 662;

Matches 100; Conservative 0; Mismatches 24; Indels 1; Gaps 1;

DB 15 CCAGAGAGATATCCATCCGCTGCACCTTCGCTGACCGAGGAGTCGAGTC 73

QY 95 CCAGCGAGATATCCGCTGCACCTTCGCTGACCGAGGAGTCGAGTC 154

QY 74 GAGCGAGATATCCGCTGCACCTTCGCTGACCGAGGAGTCGAGTC 133

QY 155 GAGCGAGATATCCGCTGCACCTTCGCTGACCGAGGAGTCGAGTC 214

DB 134 GCGCTG 138

QY 215 GCGCTG 219

RESULT 7

AC 032417; standard; DNA; 662 BP.

AT Best Local Similarity 77.1%; Pred. No. 1.23e-32;

DT 22-JUN-1995 (first entry)

DT Tumor rejection antigen MAGE-21 gene.

KW melanoma antigen; MAGE TRAs; melanoma antigen tumor rejection antigen;

OS Homo sapiens.

CS Location/Qualifiers

FT /*Tag= a

PN M0220356.A.

PP 22-MAY-1992; 004354.

PP 23-MAY-1991; 08-705702.

PR 09-JUL-1991; 08-728838.

PR 12-DEC-1991; 08-807043.

PA (LUDM-) LUDMIG INST CANCER RES.

PA Boon T, Chomes P, Van Der Bruggen P, Traversari C;

DR NPI; 92-415460/50.

FT Nucleic acid mol., encoding a human tumour rejection antigen

FT precursor useful as an immunostimulant in a vaccine for

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PS Disclosure; Page 75; 142pp; English.

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CC human tumor cells as well as in human tumors. MAGE expression is not

CC restricted to melanomas. MAGE refers to a family of tumor rejection

CC antigens referred to as MAGE TRAs or melanoma antigen tumor rejection

CC antigens. See also 032351.

QY Sequence 662 BP; 155 A; 244 C; 176 G; 87 T;

